S. HRG. 101-239

LOUISIANA COASTAL WETLANDS CONSERVATION AND RESTORATION ACT

HEARING

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENTAL PROTECTION

OF THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS UNITED STATES SENATE

ONE HUNDRED FIRST CONGRESS

FIRST SESSION

ON

S. 630

A BILL TO CONSERVE, PROTECT, AND TO RESTORE THE COASTAL WETLANDS OF THE STATE OF LOUISIANA, AND FOR OTHER PURPOSES

AUGUST 2, 1989

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THE LOUISIANA COASTAL WETLANDS CONSERVATION AND RESTORATION ACT

WEDNESDAY, AUGUST 2, 1989

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON ENVIRONMENTAL PROTECTION,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:34 a.m., in room 406, Dirksen Senate Office Building, Hon. Max Baucus (chairman of the subcommittee) presiding.

Present: Senators Baucus, Breaux, and Chafee.

OPENING STATEMENT OF HON. MAX BAUCUS, U.S. SENATOR FROM THE STATE OF MONTANA

Senator BAUCUS. The Subcommittee on Environmental Protection meets today to consider legislation introduced by Senator Breaux to conserve and restore Louisiana's coastal wetlands. The subject of this morning's hearing may appear at first as a parochial matter of little interest outside Senator Breaux's State, but 40 percent of the Nation's coastal wetlands are located in Louisiana.

These salt and fresh water marshes and cyprus swamps provide wintering habitat for two-thirds of the six million ducks and geese in the Mississippi Flyway. Louisiana's coastal wetlands support over 30 percent of the Nation's fish and shellfish harvest. However, we are in very real danger of losing these resources.

Since the turn of the century, Louisiana has lost more then a million acres of coastal wetlands. Eighty percent of the Nation's present coastal wetland loss is occurring in Louisiana. If the present loss rate remains unchanged, Louisiana will lose 2.4 million acres over the next 50 years.

Much of the tremendous loss of the Nation's wetlands in Louisiana is due to the dramatic reduction in the amount of sediment carried by the Mississippi River into the coastal zone. The Army Corps of Engineers, at the direction of Congress and with the support of the State of Louisiana, has managed the Mississippi River primarily for navigation and flood control. Unfortunately, the river control structures that were built for these purposes also have transported wetland-building sediments to the edge of the Outer Continental Shelf where they are dumped into the deep waters of the Gulf of Mexico.

Starved of these sediments, soft wetland soils subside, erode, and are lost. Senator Breaux's legislation would start us on the road to

restoring our wetlands in coastal Louisiana and eliminating future loss of these magnificent areas and the resources they support.

I commend Senator Breaux for his initiative. I look forward to hearing from our witnesses and also to learning a bit more about coastal wetlands.

Senator Breaux.

OPENING STATEMENT OF HON. JOHN B. BREAUX, U.S. SENATOR FROM THE STATE OF LOUISIANA

Senator BREAUX. Thank you very much, Mr. Chairman. I particularly want to thank you for agreeing to hold this hearing. As we know, the Senate was in session until approximately 1:00 o'clock this morning, so to begin today's very busy schedule at this relatively early hour—I thank the Chairman of the Subcommittee very much for his indulgence.

This is important legislation. It is bipartisan in its support. I would mention that the Chairman of the Full Committee, Senator Burdick, is a sponsor, along with the Majority Leader of the United States Senate, George Mitchell. My colleague from Louisiana, Senator Johnston, is a cosponsor. The Senator from New York, Senator Moynihan, is a cosponsor. The Senator from Connecticut, Senator Lieberman, is a cosponsor, along with Senator Durenberger. The legislation has very broad support on this committee as well as in the United States Senate in general.

Mr. Chairman, I would point out that the problem is a most serious one. If 50 square miles of the coast of California fell off into the Pacific Ocean tomorrow because of an earthquake, people all over the United States and indeed all over the world would be rushing to California to see what could be done. Yet, every minute, every hour, every day, every week, every month, a little bit of Louisiana falls into the Gulf of Mexico, never to return again, and there is no one rushing to find out what can be done.

We have had the world press camped out in Alaska to observe an oilspill, but the simple truth is that next year the beaches and the shores of Alaska will still be there. Eventually, they will be clean. You cannot say that about the State of Louisiana. Every hour, we lose another four acres of coastal wetlands. It is gone. You cannot go back and find it somewhere and patch it back to the State.

By the year 2040, we will have lost an area the size of the State of Rhode Island, an entire State gone. I think the Chairman has accurately pointed out how valuable these wetland areas are, not just from an esoteric or visual standpoint, but because the wetlands are the home and indeed the source of life for a tremendous amount of wildlife, fisheries, waterfowl, with commercial value as well as an ecological value. It is hard to put a dollar sign on how much it is worth.

I would hope that today, when we look at this problem, we would recognize that it truly cries out for a national solution. We cannot do it ourselves in Louisiana. As the Chairman pointed out, Louisiana accounts for about 40 percent of all the wetlands in the United States. Eighty percent of the total wetland loss in this Nation is occurring in one State.

Why is it occurring? There are a number of reasons. I would point out that Louisiana drains probably 40 percent of North America. We have had to build levees so we could take the water of the Midwest and the northern part of the United States and drain them through our State.

We are losing wetlands because of energy development. We keep most of America warm in the winter and cool in the summer because of the activities off our coast. That has contributed to the loss of wetlands.

I think that a very rational and reasonable case can be made that there is a national obligation to help, just like there would be a national obligation to help if California fell into the Pacific Ocean. We just cannot do it by ourselves.

My legislation takes a percentage of the OCS revenues of which most are coming from off Louisiana's coast and puts them into a fund to develop projects to do two things: to prevent any net loss as a result of developmental activities and to do some restoration projects. We cannot talk about it anymore.

I hope the government's witnesses this morning will not say, "We want to save wetlands, but we don't have any money to do it. We want to save wetlands, but we're going to study it some more. We want to save wetlands, but we're going to think about it." There has to be a commitment, and it is not going to be acceptable to have turf battles up here.

I don't want to hear Interior and Commerce and the Corps fighting about who is going to do it. We have sat and talked about this problem long enough. It is not going to be sufficient to have testimony saying, "We want to save wetlands and do a press release," and be unwilling to say, "We are also going to spend some money on it."

The President said he wants to go to Mars. Where is the money going to come from? I want to save the wetlands. Where is that money going to come from? It is high time that the statements of commitment to do something are followed up with the financial means to do it.

It is not going to be acceptable in this Senator's view, to say, "We are all for it, but . . ." We have had enough "buts" in this business and we are losing everything as a result of it. So I would hope that today's testimony can be positive.

There are a lot of things that this Administration wants and needs from this Congress, and I am willing to be cooperative, but I expect some cooperation on this as well.

Thank you, Mr. Chairman.

Senator BAUCUS. Thank you, Senator Breaux.

Senator Chafee.

OPENING STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Senator CHAFEE. Thank you, Mr. Chairman.

First of all, I want to welcome our witnesses and say that this is a crisis situation. I think we all recognize the value of the wetlands. It is something that many of us have been dealing with for some time. They are the feeding and breeding areas for not only

wildlife but fish and shellfish. Also, major industries exist in the Gulf.

The President has announced his no net loss of wetlands policy. Just how that is going to be done with the tremendous loss of wetlands we are having every year in Louisiana, I don't know. What could be more shocking than to lose an area the size of Rhode Island?

That is calamitous.

I would say something to Senator Breaux. I am glad he introduces this legislation. It calls our attention to this problem and the need to do something about it.

In all fairness, I do not recall our wrestling with this problem in the Senate or in this committee before, so I disagree with Senator Breaux on the point that we put this off and put this off. I do not agree with that. But I do agree that something should be done and I congratulate him for coming up with a solution. We have bemoaned the situation down there but we have not wrestled with it, and his legislation gives us a chance to get on with it.

Whether his proposal for funding is the right one or not remains to be seen. That is why we have hearings.

Thank you, Mr. Chairman.

Senator BAUCUS. Thank you, Senator.

It is true that this is an extremely important matter and is also a matter that is somewhat new, frankly, to this country. That is, the importance of wetlands.

The wetlands contain, if not most, at least a very large share of the species in the United States of America. The more we want to encourage biological diversity, the more important it becomes to encourage not only the protection against loss of wetlands but also the addition of wetlands.

Let's go to our first panel.

Ms. Hanmer, it is good to see you again.

Mr. Page, we will start with you, and we also have Ms. Bach, who is Deputy Assistant Secretary for Fish, Wildlife, and Parks with U.S. Department of Interior.

Let's begin with you, Mr. Page.

STATEMENT OF HON. ROBERT PAGE, ASSISTANT SECRETARY OF THE ARMY, CIVIL WORKS, ARMY CORPS OF ENGINEERS

Mr. PAGE. Thank you, Mr. Chairman.

May I commence by stating that we have a statement which I would like to submit for the record.

Senator BAUCUS. Without objection, it will be included.

Let me inform all of the witnesses that their statements will be included in the record. I would like each witness to hold their oral presentations to five minutes.

Mr. PAGE. I will speak extemporaneously at this point.

As you may know, we have been working over the past few days in preparation for this hearing through the Domestic Policy Council and their Interagency Task Force on Wetlands.

Mr. Chairman, I am sure that you, Senator Breaux, and Senator Chafee are aware that this Administration is very concerned about the wetlands issue. If I might repeat what Senator Breaux said a

moment ago, there is no question that this is something that cries for a national solution.

The Administration, through my voice, says that we oppose the bill, but let us not stop there. If I can be candid, I understand there is opposition to two provisions of the bill. There may be others, but I will only note these two.

One is the OCS revenues, and in my position it would not be appropriate for me to of address that issue. I do not believe that it is within the purview of the Corps of Engineers. The second is the $15 million study that is part of this bill which will be $5 million per year for three years. There is a financial consideration, but I do not know how it ties to the scope of the study, what the study will be, or the magnitude, so I cannot personally address the level of funding.

However, I can address myself to the issue which I think is the most important; that being: how do we stand concerning the preservation of wetlands and how will we work together, as Senator Breaux said, and not or have turf battles?

The Corps of Engineers, as my associates both left and right here fully understand, has produced a reconnaissance study which has now been approved. The feasibility phase will be executed through our district in New Orleans.

That study is to determine, first of all, the magnitude, the reason for the problem, and then it hopefully will identify measures for how we can address ourselves to this tremendous loss. I hope that it will not only give us a feeling and a perspective of the tremendous loss in Louisiana, but that it will be a catalyst to bring us to a solution for the Nation.

During the study we want to bring together all of the agencies that are involved in this problem so that we will address it as one, agree, and come to a solution. We have talked about this at great length, particulary ourselves and EPA, and we are coming to a consensus in looking at this objective.

Mr. Chairman, I can say that we applaud, as far as I can speak for the Corps of Engineers, the reaching out for a solution to the devastating loss of the wetlands in this country. To that end, we would go on record to say that the importance of the ultimate goal would cause us to be able to work as seriously and closely as we can with this committee and with the Senator to work out any differences. We hope to reach an agreeable solution.

I will close with that, Mr. Chairman.

Senator BAUCUS. Thank you, Mr. Page.

Ms. Bach.

STATEMENT OF MARYANNE BACH, DEPUTY ASSISTANT SECRETARY FOR FISH, WILDLIFE, AND PARKS, DEPARTMENT OF THE INTERIOR, ACCOMPANIED BY SCOTT SEWELL, DEPUTY ASSISTANT SECRETARY FOR LAND AND MINERALS MANAGEMENT

Ms. BACH. Thank you, Mr. Chairman. I appreciate the opportunity to testify here on behalf of the Department of the Interior.

I am joined by Mr. Scott Sewell, who is the Deputy Assistant Secretary for Land and Minerals Management.

As Mr. Page noted, we are the representatives from our respective agencies who sit on the Domestic Policy Council's Working Group on Wetlands. We take very seriously the charge that the President has given us to support a goal of no net loss of wetlands. Certainly this Subcommittee is aware that the Federal Government is heavily involved in wetlands protection in the State of Louisiana.

I would like to note that in addition to the study in which the Corps has the lead and the Department of the Interior is also participating, the Fish and Wildlife Service and the U.S. Geological Survey initiated a five-year wetlands loss study in 1989 at the request of Congress. We expect that the results of the study will provide a better understanding of the critical processes of wetland losses and will help resource managers develop the best management practices for coastal wetlands in southeastern Louisiana. We believe that these activities are key to understanding the inherent value of wetlands.

That study will develop a wetland data base. It will construct landscape level predictive models and develop methods to detect stress in wetlands and to evaluate the effects of introduced materials on wetlands. It will also evaluate various marsh management practices and offer technical assistance to State and local managers and landowners.

Much of this work is ongoing under the auspices of the National Wetlands Research Center operated by the Fish and Wildlife Service in Louisiana. We believe that this effort, together with the Louisiana Comprehensive Coastal Wetlands Study, addresses many of the concerns that are raised in Section 5 of the bill.

Furthermore, the Fish and Wildlife Service is involved in a variety of activities to conserve Louisiana coastal wetlands, including the administration of six national wildlife refuges in coastal Louisiana encompassing some 243,000 acres. Management of those refuges includes measures to preserve, restore, and/or enhance wetlands.

Through its consultative role on Corps water resource development proposals and applications for permits, the Service also recommends measures to mitigate the loss of wetlands. The Fish and Wildlife Service's mitigation goal for wetlands is usually no net loss of habitat value. To achieve that goal, the Service recommends ways to avoid and minimize losses of wetland habitat values and to fully compensate for unavoidable losses.

Specifically with regard to S. 630, we would like to commend Senator Breaux for his interest in a stronger State involvement in the 404 process. However, we would like to bring to the committee's attention a concern within the Department about the statutory delegation to the State of Louisiana—a concern which is also mentioned in both the EPA and Corps testimony.

Under existing law, the Clean Water Act allows for the development of a State program general permit under the current 404 program. Existing law, therefore, provides an approach for Louisiana to control most activities governed by the 404 program while maintaining the benefits of Federal involvement in the 404 process.

The Department, primarily through the Service, plays a vital role in that process that would be lost under the provisions of the

bill. Currently, the Fish and Wildlife Coordination Act requires the Corps to consult with the Secretary of the Interior through the Service before issuing the permits under section 404 of the Clean Water Act or section 10 of the Rivers and Harbors Act of 1899. The purpose of this consultation is to obtain the findings of the Service regarding fish and wildlife resources likely to be affected by each proposed action, along with recommendations on conservation measures.

The fish and wildlife resources of the Louisiana coastal area are of national and international significance. Therefore, we are interested in protecting those resources under the process provided by section 404 of the Clean Water Act.

We would also note that many of the activities listed in section 5, which provides for the development of the Coastal Wetlands Conservation and Restoration Plan, are being addressed through the two studies that I already mentioned. The Department of the Interior, principally through the Service, is already involved in extensive wetlands conservation activities.

Because of the active involvement and interest of the Department of the Interior in wetlands conservation activities in coastal Louisiana, and the U.S. Fish and Wildlife responsibility for operating several wildlife refuges in the area, we would be concerned if activities were undertaken for which the Department would not play an integral role.

A central feature of S. 630 is contained in section 12 which would establish the trust fund for use in coastal Louisiana. Each year the trust fund would receive revenues equivalent to five percent of all bonuses, rents, and royalties paid to the U.S.

New spending authority under this provision is estimated to be approximately $100 to $150 million annually, thereby increasing the Federal budgetary deficit by that amount. I must say at this point, Mr. Chairman, that the Administration is opposed to the creation of a new permanent indefinite account outside of the annual appropriations process.

We recognize that the coastal projects wetland would be important but we would recommend that such projects be weighed against other priorities in the Federal budgetary process. A report prepared for the Minerals Management Service by the Center of Wetland Studies at Louisiana State University has indicated that OCS development has accounted for 8 to 17 percent of all coastal wetlands loss in Louisiana when both direct and indirect impacts are considered.

We are aware that there are other significant wetland losses from other factors, such as erosion, sea level rise, et cetera. The Administration is concerned about the establishment of this trust fund for an unspecified length of time.

Senator BAUCUS. I am going to have to ask you to summarize, please.

Ms. BACH. Yes, sir. Finally, we would point out that the percentage of the OCS revenues, regardless of their origin, would be deposited in the fund. We note that the revenues from offshore activities in State waters are not part of the formula.

Louisiana does realize significant revenues under existing section 8(g) of the OCS Lands Act.

Senator BAUCUS. I must ask you to summarize even more briefly, please.

Ms. BACH. Sir, I think I have hit the points of concern to the Department and the Administration. All the other points are in the testimony.

Senator BAUCUS. Thank you very much, Ms. Bach.

Ms. Hanmer.

STATEMENT OF REBECCA HANMER, ACTING ASSISTANT ADMINISTRATOR FOR WATER, U.S. ENVIRONMENTAL PROTECTION AGENCY, ACCOMPANIED BY DAVE DAVIS, DIRECTOR OF THE OFFICE OF WETLANDS PROTECTION

Ms. HANMER. Thank you, Mr. Chairman.

I have Dave Davis with me, the Director of our Office of Wetlands Protection.

We have been working with the issues of coastal Louisiana for some time and fully share the sense of urgency about doing something about the dramatic, staggering loss of wetlands there. This is a special place, not an ordinary situation, but a very special situation. Because of the rapidity of the loss, I think we feel some urgency in terms of looking at the coastal restoration issues and getting on with some positive moves to address these issues.

In that regard, we have been working with the Corps of Engineers quite closely and supporting their Comprehensive Coastal Plan. I believe that does provide us with an alternative vehicle for moving forward to determine what needs to be done, what projects need to be undertaken, and what would be the appropriate way for funding those projects. EPA has not only been participating with this study, but we are prepared to provide funding in cooperation with that study.

The particular concern that we have about the way in which Senator Breaux' bill is drafted has to do with the section establishing a strong State program for no net loss. The goal is outstanding. In many of its provisions, it would really be an excellent coastal wetlands program. We applaud the goal of no net loss and we applaud the provisions that have been put into this bill for creation of the program.

The concern we have is that after the program is approved, it is essentially lifted from the Section 404 program. This really creates the possibility of a patchwork approach to Section 404 which would concern us a great deal.

In our testimony, we have suggested an alternative way in which the same goals might be attained without raising the possibility that the program would be lifted from Section 404. That would be by using many of the same objectives and provisions to create, through the existing Section 404 program, a State general permit. The State would then be able to exercise a great deal of authority over the protection of its wetlands. In fact, under such a program, it would be able to go beyond the current scope of the activities covered in Section 404, but it would operate within the broad framework of the Section 404 program.

Such a general permit is now operating in the State of North Carolina, and we understand that it is operating well. It affords

North Carolina the opportunity to play the major role, but at the same time, to play this role in a context of the kind of backup it gets from EPA, the Corps of Engineers, and the other Federal agencies that participate in the Section 404 process.

In summary, we think that there are a couple of alternative approaches to achieving the goals of this bill through the Corps of Engineers' Comprehensive Program, which we are cooperating in along with the State and through the establishment of a State general permit program under Section 404 to create the kind of meritorious structure for the State that is outlined in this bill.

That concludes my testimony. Thank you very much.

Senator BAUCUS. Thank you all very much. As I understand it, a large part of this comes down to Federal-controlled funding, to put it simply, as opposed to State-controlled funding, with some variations in between. The ultimate question is: what is most effective and how are we going to best get at taking care of these coastal wetlands? That is what counts here.

Putting aside 404 versus State and whether Federal Government handles this entirely on one hand or whether there is delegation to the States with matching funds from the States, can you just tell me what has to be done first on a program basis? Whether the Feds do it or the States do it, what has to be done first? I would like each of you to respond. You did not really address very much of that in your testimony and I think it is very important that we get that out front.

Let's start with you, Mr. Page.

Mr. PAGE. I remarked that we are putting together and working on this comprehensive plan. I think that this plan and its priorities will hopefully tell us where and how we can apply no net loss.

Senator BAUCUS. Doesn't it make sense to delegate the development of the plan to the States because they are closer to it, so long as there is some revenue to the State so they are not putting it all up? After all, this is coastal wetlands which have a national interest. They are there; they know what the problem is. What is wrong with letting the States do that?

Mr. PAGE. There is nothing wrong with that, Mr. Chairman. In fact, later on in this hearing, the State of Louisiana will probably address themselves to this plan.

They have been involved and they are working with us to evolve the plan. They are cost-sharing this plan, and they are also working with us to create a cohesiveness, if you will, of all the agencies involved, that is, State and Federal.

Senator BAUCUS. Thank you.

Ms. Bach, what is wrong with the basic argument of the Breaux bill, essentially, where we have the State develop the plan, match, and if not OCS, at least some money?

Ms. BACH. I will highlight three points, Mr. Chairman.

Based on the studies being conducted by the Corps and the Department of the Interior, in which the State is involved, we are addressing many of the items that would be called for under the State Plan in the proposed legislation. Secondly, I can appreciate the concern at the State level regarding section 404 permits. I do believe, however, that whatever process is agreed to, should be consistent with existing law, that the process is something that other

States have the flexibility and ability to participate in, and that it also protects the resources with which some of these Federal agencies are charged by law to conserve and protect.

My third concern is that there is an off-budget permanent appropriation for which there is no time frame. We are in the process of developing the priorities for construction and mitigation and, yet, the bill would have us going forward with a definitive funding process that is ahead of that planning process. It is outside the Federal budget process thereby avoiding being weighed with other priorities that have to be balanced at the national level.

Senator BAUCUS. Ms. Hanmer.

Ms. HANMER. I think the basic concern is the slowness of the normal Federal budgetary process and whether or not it can address the issues in a timely manner. The fact is that our traditional planning efforts, project design efforts, and project funding efforts can take years.

How do we speed that up? That is the issue.

Senator BAUCUS. Maybe I do not understand, but doesn't the provision of the Breaux bill, the trust fund with a certain percent of OCS, tend to address the funding question? Doesn't that tend to provide more permanence?

Ms. HANMER. I have to defer to the comments already expressed on whether or not that is the proper funding vehicle. I think it is possible for us to speed up the normal funding process to go through the Corps of Engineers' studies. The State is participating in those studies and we are participating in them.

We need to bring the plan to the table. I do not think that we have the coastal restoration plan ready. I think we need to bring it to the table as quickly as possible and then see how it should be funded.

Senator BAUCUS. Senator Chafee.

Senator CHAFEE. Thank you, Mr. Chairman.

The problem as I see it here is two-fold. One is: can something be done about saving these wetlands?

I remember going down there nearly 10 years ago to Atchafalaya. That is a big area, and there we saw an area that had been preserved as an overflow area for when the Mississippi became rampant.

The trouble is, as I understand my reading of the material on this, that this is really a man-made problem. We created these levees, set the Mississippi into a set course instead of letting it wander around the way it used to do, and as a result, the nutrients that once upon a time went out into the wetlands when the river flooded now go straight out into the Gulf. Is that about the situation, Ms. Hanmer?

Ms. HANMER. As I understand it, that is correct. There are other issues such as sea level rise and the impact on the barrier islands, but in the delta area, it is as you described.

Senator CHAFEE. Then you get into the problem of: can you do anything that is commensurate with the development that has already occurred in the area? Can you let the Mississippi wander around or can you let the overflow go out into areas that were wetlands once upon a time and are now villages and farms? The very reason the levees were built was to protect those areas.

I gather that something can be done based on Mr. Page's testimony where they are already working on two or three of these areas down there. Am I correct, Mr. Page, or is this all part of your study? Obviously, you must think something can be done or you would not have undertaken these three areas that they currently have under way.

Mr. PAGE. Yes, sir, they are working on those now.

Senator CHAFEE. The next question has to do with the funding. The funding problem, as I understand the Senator's proposal is that they would receive "X" percent of the offshore drilling receipts and that would be in perpetuity and would also require no matching funds except, I believe it is 10 percent, but that can be through services, in-kind.

I guess they would receive five percent of the OCS revenues into the fund with no limitation. The State may use in-kind contributions to make up its 10 percent share of implementing the plan. Furthermore, section 404 would be abrogated or would no longer have to be observed by the State. That gives me great worries.

It seems to me that we do not want to get into a situation where we say to the State of Louisiana, "Here is an unlimited sum of money in perpetuity, five percent off the top of the OCS revenues. You do not have to observe the 404 provisions any longer; they are suspended. And Fish and Wildlife," for example, "have no role in this."

That is my understanding, Ms. Bach.

Ms. BACH. It would be very informal, Senator Chafee.

Senator CHAFEE. Those are funding problems that we will have to get into, but I think that what we are really seeking from the witnesses is: can we do anything about this problem, looking at it from an engineering or mechanical point of view, commensurate with the development that has occurred in the area?

Now that is your area, Mr. Page. What about it?

Mr. PAGE. Senator, I believe that we can. We are starting the study now. As we talk about the comprehensive plan, there is physical work being done in the delta.

One of the main portions of this plan must address how much of this loss is man-made and how much is natural. Man-made, of course, brings us to the question of how we apply no net loss.

It is true that flood control has caused a great deal of wetland loss. The tradition of the Corps years ago was that they, and the Nation, were not concerned with wetland loss or fish and wildlife. The pendulum has now swung. We are now very concerned.

We have to balance flood control against the loss of these wetlands. That is what we are doing at this point, Senator.

Senator CHAFEE. When are you going to have an answer? When is your study going to be completed?

Mr. PAGE. There is some criticism about the schedule. It will start in October and will take three years. We have got to look at accelerating that time.

Senator CHAFEE. I thought you had something under way?

Mr. PAGE. It is approved. We will be starting on the plan in October of this year.

Senator CHAFEE. I see.

Thank you, Mr. Chairman.

Senator BAUCUS. Thank you, Senator.

Senator Breaux.

Senator BREAUX. One of the interesting things about all these hearings—I have been doing this for 17 years as a Member of Congress—is that you always hear, "We have a plan; we have a study; we have a study that studies the last study."

The study here, the Coastal Wetlands Study done by the Corps, lists pages of studies that have focused on what the problem is and what should be done. It really is not complicated. We know what is causing it. We can fill libraries with plans and studies.

It is not acceptable in 1989 to say, "We are going to study it and we have a comprehensive study that is coming up." I applaud studies, but if we wait three more years, we will have lost perhaps another 180 square miles of the State when we could be starting to do something instead of having another study. Having another study is not the answer. We have the studies.

Let me address the question that Senator Chafee raised about the delegation of the permit program to the State. That is not an original idea with me.

Ms. Hanmer, your boss at EPA, Bill Reilly, recommended that. The final report of the National Wetlands Policy Forum said,

> To encourage the States to accept the responsibility for regulating the wetlands and to create a more effective and efficient wetlands system, the Forum recommends that Congress enact legislation to allow the delegation of all section 404 permitting responsibilities including those in navigable waters and adjacent wetlands to qualified States that have worked out an effective process for coordinating their review with the Corps.

This is Bill Reilly's recommendation. That is why it is in the bill.

Now what I am hearing from Interior and from the Corps is, "We don't quite like that because we want to keep our hands in it." Your hands are in it.

It is not true that the 404 permit will be abolished. The legislation clearly requires something that the current 404 permit does not even have. It says that the program that the State would enter into with the Federal Government has to be at least as stringent as the current 404 program. In addition, it must have as a goal, no net loss of wetlands in the permitting process.

Can anybody argue that that is not more stringent, more protective than the current system?

Mr. Secretary, does the current 404 permit have as an obligation, no net loss in the granting of those permits?

Mr. PAGE. No.

Senator BREAUX. So my legislation says that the State will enter into a program of regulation that has been recommended by Bill Reilly, which says that it must be at least as stringent and in addition to that it must have something the current program does not have, no net loss of wetlands. Under this legislation, anytime the State is not doing that, the Federal Government can yank the whole program away.

This is not a novel idea with me. It has been studied and studied and recommended by the person who runs EPA today.

Do any of you differ with what I just said, and if so, why?

Ms. HANMER. I think that the provisions you have placed in the bill for what the State program would do are really excellent. One

of the things that is different than what we recommended is that it applies to coastal wetlands only and the type of delegation that we are fostering would be a statewide program, not a coastal program.

I think there are some minor issues, but important to us is that we do not think EPA's authority under section 404(c) would continue to apply after the program is turned over to the State. There is a question about whether or not our enforcement authorities would be affected.

I think those are smaller matters, but it is the fact that it is a coastal program, not statewide——

Senator BREAUX. Do you differ with the recommendation of the National Wetlands Policy Forum written by Bill Reilly?

Ms. HANMER. No, sir. In fact, we strongly supported the Wetlands Forum, and we are moving forward with both money and authority to implement those recommendations for State programs.

Senator BREAUX. Let me ask about the money. Let's face it—we know what to do. It is not complicated.

We have to have a new permitting program that says no net loss, and there has to be some projects that restore the lost wetlands. It is going to cost money.

Now, $2.4 billion came from the OCS revenues last year, with 72 percent coming from activities off the coast of one State, the State of Louisiana—72 percent of the activities which contributed to the loss. Does anyone have a funding mechanism that is better than this, that will put some money into the program?

Ms. BACH. Senator Breaux, as mentioned in my statement, we do believe that there is a funding mechanism available through the annual congressional appropriations and budget process.

Senator BREAUX. Under that process, we are losing 55 square miles each year. What is going to change that?

Ms. BACH. Sir, I do think that Congress and the Administration are concerned regarding wetlands loss, and that the current budget process should address these national concerns.

Senator BREAUX. Let me ask each of you: what was your recommendation to OMB on this legislation?

Mr. Page.

Mr. PAGE. I will state again, Senator, that we applaud and want to support any legislation that has as its purpose the preservation of the wetlands. If there is a difference in that policy, and I do not think there is, then it is centered around, as we laughingly said before, details that pertain to it. Of course, the OCS revenues and the cost of the study may be more than details to you.

I can say that we have worked with EPA and Bill Reilly for some time about delegation of permitting to the States.

Senator BREAUX. That is something the Corps has always supported, is it not?

Mr. PAGE. We have supported it. I have to get on the fence a little bit though.

I understand Senator Chafee's concern that he may feel that we are totally abrogating the Federal role in the permitting. We are not. I think the role is still there. As long as it remains and we have some control, we would applaud that sort of thing.

I agree that very seldom has EPA used the 404(c) permitting veto. We, however, do think that it should be there, and that they should be allowed to keep it. I think that is one of their concerns.

We would like to see an expanded state role. We applaud what you are doing to go forward with the preservation of wetlands.

Senator BREAUX. The two key points are that we do not need to study anymore——

Mr. PAGE. We got your message.

Senator BREAUX. We are having problems printing just the titles of all the studies that have been done, let alone the studies. The second thing is that unless there is a realistic, targeted commitment to get some money to the projects, we can talk about it until it is all gone. At the rate it is going, it will not take that long.

Thank you, Mr. Chairman.

Senator BAUCUS. Let me ask a basic question of each of you. I will describe two policy choices and ask which you believe is preferable.

On the one hand, we could choose to provide 100 percent Federal funding for restoration, protection, and enhancement of coastal wetlands, let's say mostly in Louisiana, with no requirements on the State to provide cost-sharing or to develop policies to help achieve the goals. On the other hand, we could provide Federal funding for the restoration, protection, and enhancement of Louisiana coastal wetlands, but require in return that the State adopt a comprehensive plan including a tough regulatory program to make sure that the wetland gains made through the restoration and protection are not lost to wetland development.

In your opinion, which is more desirable, Ms. Bach?

Ms. BACH. Mr. Chairman, I would have to say that neither of the two approaches are quite appropriate. We need to recognize that substantial planning is going on. These are planning studies rather than scientific studies and they do involve the State, an issue which is being addressed at this hearing.

Senator BAUCUS. If you are forced to make a choice?

Ms. BACH. Your latter option would be preferable, taking into consideration the planning activities already authorized by the Congress.

Senator BAUCUS. Mr. Page.

Mr. PAGE. I would go with the latter. I would like to see us where we could share with the State on cost and reduce Federal funding.

Senator BAUCUS. Ms. Hanmer.

Ms. HANMER. I would also say the latter and I think there should be a provision where the Federal and State governments share the cost.

Mr. PAGE. I agree with that.

Senator CHAFEE. I would like to ask a question of Ms. Bach.

Do I understand from your testimony, that Louisiana currently receives some funds?

Ms. BACH. Under OCS development, that statement is correct, Senator.

Senator CHAFEE. I believe you talked about Louisiana receiving a substantial amount of money currently under the bonuses paid for

the Federal leasing on the first three miles offshore. Is that correct?

Ms. BACH. The second three miles from shoreline, which is the first three miles of the federally-managed Outer Continental Shelf, is the area which 8(g) of the Submerged Lands Act concerns Senator Breaux is certainly quite familiar with this statutory provision.

As of June 1989, Louisiana had received approximately $700 million under this section of the law.

Senator CHAFEE. Let me ask the Senator from Louisiana: I presume that goes into the general revenues of Louisiana.

Senator BREAUX. Let me make two very quick comments. Louisiana has a State trust fund with monies earmarked for wetland restoration. Although the State is broke, the legislature just created a multi-million dollar trust fund earmarked solely for wetland restoration. Those monies would be used to match the Federal monies.

The 8(g) money is State oil. It is not like the Federal Government is giving us something. Those funds are coming from oil underneath State-owned lands. Those are State funds and we are entitled to what the State owns, no more, no less.

Senator CHAFEE. Here is the part I was referring to, Ms. Bach, at the bottom of page 9.

Section 8(g) of the Outer Continental Shelf Lands Act was amended to provide Louisiana with 27 percent of all revenue derived from the first three miles of the OCS.

Is that all revenue from the first three miles off of Louisiana, or is that all revenue from the first three miles of the Outer Continental Shelf anywhere?

Ms. BACH. Sir, Scott Sewell from LMM is here. I would like to have him explain that provision under the OCS Lands Act.

Senator CHAFEE. Please make it brief if you can.

Mr. SEWELL. My name is Scott Sewell, the Deputy Assistant Secretary of the Interior for Land and Minerals Management.

The statutory language for section 8(g) specifically includes a provision for wetlands mitigation. I believe that the language was included by Senator Breaux. It refers to the second three miles. The first three miles are State waters. The second three miles cover the drainage of oil in jointly-owned reservoirs between State and Federal waters. In addition, the percentage of royalties that was negotiated was increased to take into consideration some of the effects of the oil industry on coastal erosion and wetlands loss.

Senator CHAFEE. But 8(g) is a national fund.

Mr. SEWELL. Yes, sir.

Senator CHAFEE. And 27 percent of this national fund goes to Louisiana?

Mr. SEWELL. No, sir, it goes to each State. California receives 27 percent of the revenues from the waters offshore their State and Texas receives 27 percent of the revenues from waters offshore their State.

Senator CHAFEE. I see.

Mr. SEWELL. I think that Louisiana has received approximately $20 million over the past three years from that fund which is an ongoing fund.

Senator CHAFEE. Ms. Bach, this should then read 27 percent of all revenue derived from the second three miles. Is that correct?

Ms. BACH. That is correct, Senator.

Mr. SEWELL. The testimony refers to "The first three miles of OCS," but you are actually talking about miles four, five, and six.

Senator CHAFEE. All right.

Rebecca, I am very interested in section 404, as you know. For the Federal Government to withdraw all powers under 404 makes me nervous. It makes me more than nervous—I just don't like it.

What are your thoughts on that? In your testimony you said, "Upon approval of the permit program by the EPA and Army, the existing section 404 program would no longer be in effect in Louisiana." We do not do that with anybody else.

Under the plans with North Carolina, even though they have the permitting process, we do not just abrogate our powers under it, do we?

Ms. HANMER. No. The way the general permit is written, the State of North Carolina has a considerable flexibility but there is still an opportunity for the Federal agencies to review individual permits and there is also a provision that the Corps of Engineers can override if there are serious objections.

Senator CHAFEE. I think that provision of the legislation goes too far in my estimation.

Mr. PAGE. They have the 404(c) in there, Senator, which they need to retain. That is EPA's veto.

Senator CHAFEE. Under this legislation?

Mr. PAGE. No sir, but it is retained under the North Carolina plan.

Senator CHAFEE. That's right. This is a unique proposal of S. 630, pushing the Federal Government completely out of the 404 procedure totally, correct?

Ms. HANMER. It would go beyond the normal delegation situation, yes.

Senator CHAFEE. It would take them out, would it not?

Ms. HANMER. Yes, sir.

Senator CHAFEE. That is beyond the normal situation.

Senator BREAUX. Mr. Chairman.

Senator BAUCUS. Senator Breaux.

Senator BREAUX. I want to make it very clear—this is not my idea. The State of Louisiana probably has enough problems without taking on this burden.

This is from the suggestion of your current boss, Bill Reilly, who said that the States ought to have an approved authority.

Ms. HANMER. Yes.

Senator BREAUX. My legislation says that it is not only approved authority, but it has to be more stringent than the current 404 permit. The current 404 permit does not have as a goal, no net loss.

This legislation says that the only way the State can get it is if it is approved by the Federal Government in the first place, and secondly, if it has as a goal of the permitting activities, no net loss of wetlands. That is better than what we have on the Federal level.

I do not understand why all of a sudden, we are taking the Federal Government out of it. In a sense, this is a recommendation from the National Wetlands Policy Forum which the current

people running EPA made. This is not John Breaux' idea. It came directly from the book and was put into the legislation. We added the fact that it has to have as a goal, no net loss of wetlands, which the current Federal program does not have.

Why is it that now this is all such a bad idea?

Mr. PAGE. I do not think that it is. I believe that it is a matter of understanding what is there, and I would be more than happy, along with Rebecca, to outline that program and the concerns that Senator Chafee has about the need for the Federal Government to maintain their authority.

I believe we need to have a little better understanding, and we would be pleased to work with you, if that is agreeable.

Senator CHAFEE. I would say this, if I might, to the Senator. I think we are both looking at the Conservation Foundation report, and if you look on page 21, you will note that in the recommendations,

> To support increased State assumption of regulatory authority, the Forum recommends that EPA exercise appropriate oversight over delegated programs. The Agency should normally not involve itself in the review of individual permits except to the extent necessary to exercise its responsibilities under section 404(c) of the Clean Water Act.

So I do not think you are quite accurate in suggesting that Ms. Hanmer's current boss, Mr. Reilly, in his prior incarnation, was recommending ditching section 404. That is not what the report says.

Senator BREAUX. If the gentleman would yield, neither am I. I am saying that we have a strengthened 404 program with a better goal than the current 404 program has. If the State would not be carrying it out according to the plan which EPA and the Corps would have had to approve in the first place, then that is the Corps' authority to say, "You are not running it right," and yank it away from them.

I would just as soon have the Federal Government do it all and just send only the money. I am trying to involve the State in the process and have them do something more than just receive the money and construct the projects. If someone would prefer that the current permitting program stay like it is, that is fine. I have no problem with that. Make the Federal Government continue to do all the work.

It would certainly be a lot easier politically for the State to not be involved in it. I have no problem with that, but I do not think it is good management to say that we are going to take the money, do the projects, and the heck with any kind of permitting.

It is easy to solve that problem. Just give it back to the Corps.

Mr. PAGE. We are looking at the States assuming these responsibilities, as long as we can maintain that Federal authority.

Senator BREAUX. Would you support it if the legislation retained the 404(c) authority?

Ms. HANMER. I think that would certainly alleviate the major concerns.

Senator BREAUX. Give me the language and we will put it in right now.

Mr. PAGE. We could work that out with you outside of this forum. We mentioned earlier that there are certain elements which we can work together on, and that is one of them.

Senator BREAUX. If that is the only problem, it will be very simple to put a one sentence statement in the bill keeping the 404(c) authority in the Federal Government and have the permitting program carried out like the legislation recommends.

Senator CHAFEE. That is in that particular area. I do not want to give the suggestion that just because we have zeroed in on that, that everything else in the bill is fine.

We want to be helpful here. I personally feel that, as much as this is a problem and crisis, I personally do not favor abrogating the cost-sharing provisions. Modest though they may be, I still think they may be a restraint, if you will, as regards willful and reckless spending.

Ms. Hanmer, I do not think that a State can now match its cost-sharing by in-kind services, can they?

Ms. HANMER. Different grants operate in different ways, but under the ones we have in the Clean Water Act, no. It would be matching funds.

Senator BREAUX. How about with the Corps?

Mr. PAGE. Our cost sharing requirements are different for different types of projects. However, for all projects, except inland navigation, the non-Federal sponsor must provide required lands. Furthermore, in-kind services can only be used to offset a portion of any cash payments that are required.

Earlier I made the statement that we agree that getting away from 100 percent Federal funding is something we prefer. We want to see the cost-sharing, and the taking of some of the burden from off the Federal Government.

Senator BAUCUS. Any other questions?

Ms. BACH. Mr. Chairman.

Senator BAUCUS. Ms. Bach.

Ms. BACH. The Department of the Interior is concerned that the proposed 404 process in the bill would abrogate our responsibilities under the Fish and Wildlife Coordination Act.

Senator BAUCUS. Thank you.

Thank you all very much for your testimony.

Our next panel consists of Mr. Dave Soileau, the Technical Coordinator for the Coastal Activities Office of the Governor of Louisiana. He is accompanied by Ms. Virginia Van Sickle, Secretary of the Department of Wildlife and Fisheries for the State of Louisiana.

At this point, I am going to turn the hearing over to the Senator from Louisiana. I have another commitment this morning and I must leave at this point.

Senator BREAUX [assuming Chair]. I thank the Chairman and appreciate his being able to be here to get this hearing started.

We note that there is a vote in progress at this time. The committee will stand in recess to allow us to vote.

[Recess.]

Senator BREAUX. The subcommittee will return to order.

We would like to welcome our panelists, Virginia Van Sickle, Secretary of the Department of Wildlife and Fisheries and Dave

Soileau, Technical Coordinator of Coastal Activities for the State of Louisiana. Both bring a great deal of expertise and knowledge in this area. We are very pleased to have them with us this morning.

Dave, Virginia, who wants to go first?

Mr. SOILEAU. Senator, I would like to have Virginia lead off because she will be talking more about the fish and wildlife attributes of the wetlands that we have been talking about saving this morning. Then I will make some summary remarks about what we are doing currently within the State.

Senator BREAUX. Fine.

STATEMENT OF VIRGINIA VAN SICKLE, SECRETARY, DEPARTMENT OF WILDLIFE AND FISHERIES, STATE OF LOUISIANA

Ms. VAN SICKLE. My name is Virginia Van Sickle and I am Secretary of the Louisiana Department of Wildlife and Fisheries.

As Senator Baucus pointed out earlier, it was not many decades ago that the general public perceived wetlands as wasteland, and that is basically how we treated them. In more recent years, there has been an increasing recognition of the value of our wetlands. Organizations like Ducks Unlimited, the Fish and Wildlife Service, and State fish and game agencies have worked together to protect interior wetlands that have been deteriorating and disappearing as a result of agricultural development.

However, other than from a regulatory standpoint, little attention has been paid to the loss of coastal wetlands. Eighty percent of the coastal wetland loss in the United States occurs in Louisiana each year. Roughly one-half of our coastal wetlands have been lost.

This loss is caused by natural processes and man's interference, in combination. The Corps has leveed and channeled the Mississippi River from Cairo, Illinois to the Gulf of Mexico, preventing natural over-bank flooding and sediment deposition required to maintain our coastal marsh.

Thousands of miles of oil field canals have directly destroyed our wetlands in the support of energy development. Over 80 percent of this country's OCS or Federal offshore oil and gas production has come on shore in Louisiana through hundreds of pipelines, canals, and navigation channels. The impact of providing flood control and waterborne commerce for two-thirds of the United States and for the development of onshore and OCS oil and gas has left our coast in a scarred and deteriorating condition.

The good news is that we still have three million acres of coastal wetlands left in Louisiana. This comprises 41 percent of the Nation's coastal wetlands. Further demise of coastal wetlands in Louisiana and this sediment-starved ecosystem has implications for fish and wildlife in much of the United States, not just in Louisiana.

Consider waterfowl, for example. Although much of the decrease in waterfowl is attributed to the loss of interior wetlands, waterfowl experts believe that habitat changes in the Gulf Coast will adversely affect the number of waterfowl surviving through the winter and their subsequent reproductive success. There is a very good reason for concern.

The number of ducks wintering in coastal Louisiana has declined from an average of 4.6 million birds in the early seventies to less than 2.8 million over the past couple of years. This is a loss of almost one-half of our migratory waterfowl.

Louisiana marshes still support more waterfowl than any other State, including one-quarter of North America's entire duck population and over two-thirds of the duck population for the most productive Mississippi Flyway. Our wetlands support 500,000 geese each year, 1.5 million American coots and hundreds of thousands of non-game, migratory birds, many of which are endangered and threatened.

Louisiana wetlands also support this country's largest population of fur-bearers. We rank first in the United States' fur production and first in North America.

Finally, let me give you a little bit of perspective on the relationship of the United States' fisheries production to the Louisiana wetlands. Our coastal ecosystem is made up of forested wetlands, marsh, barrier islands, and open water. Between the marsh interface and the barrier islands lies the most productive estuary in this country. The productivity of this estuarine system is largely due to primary or photosynthetic productivity of our marshes.

Louisiana leads the Nation in the production of seafood, with an average of 30 percent of U.S. landings annually. We are top producer of shrimp, menhaden, oysters, and crabs. Our shrimp fishery is valued at an average of $200 million per year dockside. Last year we produced a record 53.6 million pounds of crabs alone.

Fishery production in the Gulf of Mexico is heavily dependent upon the estuary/marsh complex in South Louisiana. These nursery grounds support fishery harvests from Mexico to Florida.

The National Marine Fisheries Service has just published several papers which present the alarming theory that once the marsh fraction of our coastal ecosystem begins to be outweighed by open water, productivity will begin to decline. The National Marine Fisheries Service asserts that the continued conversion of marsh to open water will have a peak or optimum effect, which they estimate we are experiencing now, and then will begin to decline precipitously. Scientists at LSU and the National Marine Fisheries Service predict a "collapse" of our fisheries within 30 years if the trend in marsh loss is not reversed.

We can restore wetlands. There was some discussion of whether or not it could actually be accomplished this morning.

Over 500,000 acres of Louisiana coastal marsh are actively managed by the Department of Wildlife and Fisheries and the U.S. Fish and Wildlife Service. That is roughly one-sixth of the wetlands that we have left. We have virtually eliminated wetland loss in managed areas such as Rockefeller Refuge and Marsh Island.

We can slow the unique rate of wetland loss which is occurring in Louisiana. The net loss of wetlands due to development activities can be eliminated with the assistance of EPA and the Corps of Engineers. We recognize the importance of strict regulatory controls.

Our waterways, oil, and natural gas have been very important to the Nation. Our wetlands, too, are a national concern. Thus far we have done an excellent job at monitoring the demise of an ecosystem, but little more.

This summer, the Louisiana legislature created a trust fund that will cover the State's share of any projects that could be envisioned under S. 630. Mr. Soileau of the Governor's Office will tell you more about this unprecedented State commitment.

Thank you.

Senator BREAUX. Thank you, Virginia.

Mr. Soileau.

STATEMENT OF DAVID M. SOILEAU, TECHNICAL COORDINATOR, COASTAL ACTIVITIES, OFFICE OF THE GOVERNOR, STATE OF LOUISIANA

Mr. SOILEAU. Senator, I want to start off by saying that I agree with an observation you made earlier this morning that it is about time that we quit studying and start building. I am very unhappy with some of the comments I heard from my Federal partners who said that we need more and more studies and more money invested in years of examining what the solutions are.

For the most part, frankly, State and Federal technicians know how to approach the problem. In fact, nearly a year ago under a charge from Governor Roemer, cabinet-level individuals from State government agencies prepared a report identifying a number of measures to enhance and restore vegetative wetlands in coastal Louisiana. Admittedly, some of the recommendations in that report will require further planning and evaluation, but many of them could be implemented now if adequate funding were available.

Let me set the record straight on some previous comments that perhaps Louisiana was not taking its problem seriously and that it did not intent to do something about the problem itself. Louisiana does in fact intend to do its share.

Not only do we now have a report that identifies measures that we are ready to implement almost immediately, but about two weeks ago, the Louisiana legislature approved a bill, subsequently signed by Governor Roemer, which created the position of an Executive Assistant to the Governor to deal with these coastal issues and to coordinate with the various State departments in ensuring that the recommended measures get implemented. It also established a Wetlands Conservation and Restoration Fund, a State fund, not a Federal fund.

Monies in this fund could accrue at the rate of $25 million per year, depending on the level of mineral revenues coming to the State on an annual basis. Our next effort will be to seek constitutional protection of that fund by way of a referendum of the voters of Louisiana on October 7th of this year.

We do intend to do our share. We intend to put up our share of the money, and we have already identified a number of proposals that could be implemented immediately.

It is important for our national leaders, however, to understand that we did not get into this predicament by ourselves. Dredging and leveeing of the rivers in upper parts of the Mississippi Valley for navigation and single-purpose flood control forced increased runoff into Louisiana. Of course, this required that we in Louisiana build levees and floodways to alleviate flooding caused by the increased runoff from the northern States.

The long term impact of such activities was to cut off the annual overflow of sediment-rich waters into our coastal wetlands, leading to their deterioration and destruction. As Virginia Van Sickle pointed out earlier, this deterioration has been accelerated by the intrusion of salt water through canals that have been dug to accommodate transmission pipelines and by the development of onshore infrastructure needed to support the exploration and production of oil and gas reserves on the Outer Continental Shelf of Louisiana.

To combat such long term impacts, we need nothing short of the kind of program and funding that would be provided for in S. 630. If enacted, that bill would provide from $140 to $150 million per year to be used to conserve, protect, and restore coastal vegetative wetlands in the State of Louisiana.

Frankly, this level of funding is critical in view of the magnitude of the effort that will be needed to bring the wetland loss problems in coastal Louisiana under control. Passage of this bill would also be an important step forward in helping to attain the goal of no net loss of wetlands as it relates to the loss trends that have been set into motion by nearly a half century of Federally sponsored navigation and flood control projects in Louisiana.

We support the bill. We admit that it is a lot of money, but frankly, it will take a lot of money to solve the problem in Louisiana. We conservatively estimate that some of the plans and programs that we currently have on the drawing board for implementation will cost, if all are implemented, in excess of $2 billion. We need a lot of money and we need the kind of Federal support that is provided for in this bill.

We appreciate the opportunity to appear before this committee and will be happy to try to answer any questions.

Senator BREAUX. Thank you both for your testimony and for your continued leadership role in the State. I think the State has really gotten its act together in a major way as we have worked on these problems over the years.

The bill would require the State to do a number of things. I would like you to address how you think the State would meet the requirements that are in the bill.

Number one, it requires a single State agency to be in charge of the wetlands plan. A single agency of the State would be required to develop this plan. Do we have that or can we develop that?

Mr. SOILEAU. Yes, sir, Senator. As I pointed out, one of the features of the legislation that was recently adopted and signed by the Governor provides for an Executive Assistant to the Governor whose attention will be directed to coastal restoration and to other coastal activities in Louisiana. It would be under the guidance of this executive assistant that a multi-agency task force would develop this plan.

Senator BREAUX. What about the trust fund? Would you elaborate on the State trust fund that was adopted by the legislature? What does it encompass and how much money is envisioned in that State trust fund?

Mr. SOILEAU. We anticipate that the trust fund could provide up to $25 million on an annual basis. Of course, this depends on the

amount of mineral revenues accruing to the State of Louisiana from State property and State water bottoms.

Senator BREAUX. Where would the State funds come from?

Mr. SOILEAU. The State trust fund would be established from mineral revenues coming to the State of Louisiana. Specifically, the legislation calls for the first $5 million in mineral revenue coming into the State of Louisiana to be dedicated to the trust fund. Once the mineral revenues into the State of Louisiana exceed $600 million, we would get another $10 million into the trust fund. Once mineral revenues exceeded $650 million, we would get the next $10 million.

According to the projections of anticipated mineral revenues into the State this year, we anticipate reaching that $25 million mark in the trust fund this year. We anticipate some reduction in mineral revenues next year and that the fund will possibly accrue only $15 million. It will probably vary over the next 5 to 10 years between $15 and $25 million per year into the State trust fund.

Senator BREAUX. Let me direct your attention to the discussion that we had with regard to the delegation of permit activities to the State which was recommended by the National Wetlands Policy Study. The legislation, for the first time, would cover permits that would be required for development activities. That is intended to cover much more than is currently covered by the 404 permit, which basically covers only dredge and fill activities.

On page 6 of the bill, we talk about development activities that would be subject to the permits to mean any activity including the discharge of dredge or fill material which result in more than a de minimis change in the hydrologic regime, bottom contour, or the type of distribution or diversity of hydrophilic vegetation or which impairs the flow, reach, or circulation of surface waters within wetlands or other waters.

The bill goes further to point out that the program that the State would have to enforce would have to be one that would assure no net loss of such wetlands. It is our intent to really do a lot more than is currently being covered by the existing 404 permit. Do you have any comments on whether or not that would do that?

Ms. VAN SICKLE. Yes, sir. I supervised the Coastal Management program for about a year and a half, and the guidelines that we are using now have not been updated in about eight years. In order to accomplish Congress' mandate to Louisiana, they would have to be updated to accomplish what you are talking about. The burden would be back on us.

Senator BREAUX. Would this require more than is currently being done with regard to dredge and fill activities?

Ms. VAN SICKLE. If the guidelines were revised, yes.

Senator BREAUX. Right now, 404 permits are only required for dredge and fill activities. This requires more.

Ms. VAN SICKLE. And the discharge end of things, too. The things that are regulated, such as oil and gas field discharges, drilling fluids, and those sorts of things, should be included in our new guidelines.

Senator BREAUX. The Secretary of the Army and of EPA would have to agree with this plan before they could approve it. There

was some discussion from some of the agencies this morning that they felt they would still want to retain their 404(c) authority.

Do you have any comments on the feasibility of that or are there any problems with that?

Mr. SOILEAU. I think that would be quite appropriate, Senator. I do not see any problem with that reservation.

However, I would challenge those who question the State's capability to be the sole administrator of a wetlands permitting program in Louisiana to just take a look at what we have already accomplished in Louisiana over the past 8 to 10 years when we have, in fact, had a coastal use program and a permitting program which is basically a dual permitting program and is rather redundant to that which is ongoing with the Corps of Engineers. That is causing us a lot of problems.

The one thing that I have experienced under the current State Coastal Use Program is that we are much more diligent and successful in getting permitted projects mitigated in our coastal wetlands than the Corps of Engineers has been. I would suggest that we are doing a better job than the Corps of Engineers is right now.

Ms. VAN SICKLE. It sounds like we are getting mixed signals, too. At a meeting recently in Lake Charles with General Hatch and other representatives of the Corps, we were encouraged to pursue the State authority for 404.

Senator BREAUX. As I tried to point out, this is not an original idea with me. This has been recommended. Every time we sat down with anyone in the permitting program, they have recommended that the State become involved in it.

Ms. VAN SICKLE. That is what we have been told.

Senator BREAUX. I would think that perhaps the State would say, "Look, we don't want the burden. We are going to get all the political heat for running the program—why do we need it?" It is in the legislation because it has been recommended to us by others over a long period of time.

I appreciate your help and your testimony today.

Senator Chafee.

Senator CHAFEE. Thank you, Mr. Chairman.

Ms. Van Sickle, in your testimony you talk about the successes that you have had. I would be interested in exploring that a little more with you.

On the bottom of page 2 of your testimony you say,

> We can restore wetlands. Over 500,000 acres of Louisiana coastal marsh are actively managed by our Department of Wildlife and Fisheries and the United States Fish and Wildlife Service. We have virtually eliminated wetland loss in managed areas such as the Rockefeller Refuge and Marsh Island.

Can you tell us a little bit about how you do that?

Ms. VAN SICKLE. Yes, sir. We control the influx of salt water into marshes that are of fresh to brackish nature so that the plants are not killed.

Senator CHAFEE. How do you control it?

Ms. VAN SICKLE. Through the use of weirs, which are sort of like a sill that can be fluctuated to let the shrimp and finfish larvae into the marsh so they can mature without having the daily inundation of the marsh with the salty Gulf water that is higher now as a result of sea level rise.

Senator CHAFEE. Is this a man-made levee of some type that has a floodgate in it? In other words, is it something you have to construct?

Ms. VAN SICKLE. Yes, sir, you do. A lot of times we just use the existing bridge framework that was formed as the bayous and the Mississippi River flip-flopped back and forth across the coast. Those are the basis for the management structures that we have in place.

That is just one way. You can plant grass, too. We do all kinds of things—water level fluctuation, sediment fencing to trap sediment.

Senator CHAFEE. But when you talk about water level fluctuation, you are talking about some kind of a gate that you must control?

Ms. VAN SICKLE. Yes. That is to encourage the germination of annual grasses which are the wetlands.

Senator CHAFEE. And that has been successful? I take it that Rockefeller Refuge and Marsh Island are two separate places?

Ms. VAN SICKLE. Yes, sir.

Senator CHAFEE. Would you say that those represented easy areas or difficult areas to save when you started out? What I am trying to get at here is how well we can do in all this.

As you outlined in your testimony, man has been responsible for most of this—not just man in Louisiana, but man as far up as Cairo, Illinois. My question is: what are the solutions and the feasibility of these solutions?

Ms. VAN SICKLE. We have used the active management in the structures like you are talking about in areas that are out of the current influence of the Mississippi River Delta. Even if we put fresh water diversions in seven locations along the Mississippi River, it is not going to help south-central Louisiana and southwest Louisiana because the river does not flow that way anymore. That is where you use techniques like we have used in the Department of Wildlife and Fisheries.

In the area along the river, we know that the introduction of the sediment will work. Historically, the natural crevasses that would occur in the spring built marshes there. We know they will work. The geological record alone will support that.

Senator CHAFEE. Fine, thank you very much.

Thank you, Mr. Chairman.

Senator BREAUX. I thank both of you very much. I think that you are to be commended for being here and also for the continued good work. It is like night and day from the State standpoint of what we are doing today and what we were doing a few years back. The State has its act together and is now looking for a partnership with the Federal Government.

Thank you very much, Dave and Virginia.

Let me welcome our next panel. Mr. Bob Hayes represents the Coastal Conservation Association. Mr. Jim Tripp is with the Environmental Defense Fund. Mr. Ed Osann is with the National Wildlife Federation, and Mr. Paul Kemp is Executive Director of the Coalition to Restore Coastal Louisiana.

We are pleased to have you here, gentlemen, and delighted to receive your testimony.

Mr. OSANN. Mr. Chairman, one of our panelists was called out by an unavoidable conflict for the next half-hour or so.

Senator BREAUX. All right. Let's go ahead and start and we will take Jim when he comes back. His statement will certainly be part of the record, but we will have him testify whenever he gets here.

Please go ahead.

STATEMENT OF EDWARD R. OSANN, DIRECTOR, WATER RESOURCES PROGRAM, NATIONAL WILDLIFE FEDERATION

Mr. OSANN. My name is Edward Osann and I am the Director of the National Wildlife Federation's Water Resources Program. The Federation is the Nation's largest conservation organization, and we have an ongoing interest in wetlands protection and the management of the Nation's water resources, including the nationally important resources of coastal Louisiana. Appended to our testimony is a resolution adopted in 1982 by the National Wildlife Federation regarding the abatement of Louisiana coastal wetland losses.

Mr. Chairman, the Federation strongly supports the purposes of your bill, S. 630. It would establish a Federal/State partnership to eliminate the net loss of wetlands from new development and begin restoring wetlands damaged by past activities.

We commend you and other members of the Louisiana delegation for recognizing the enormous dimensions of this problem and for assuming the leadership that is necessary to develop workable countermeasures and solutions. I would also like to take a moment to commend Governor Roemer and the State legislature for committing the State financial resources toward this partnership. I think it is truly remarkable, Mr. Chairman, that in the depths of the serious recession that is now affecting Louisiana, the State has mustered the political will and the commitment to dedicate funds that are badly needed in a variety of State programs for this very important purpose.

We think that S. 630 is a good starting point for Congress to begin developing the strategy for reducing the rate of wetland loss in coastal Louisiana. The rate of wetland loss in Louisiana, in round numbers, about a square mile per week, is truly alarming. Against this backdrop, we feel that enactment of this legislation is necessary.

There are competing demands, of course, for Federal resources. There are competing demands for dollars in the natural resource area. But the case for a new Federal/State initiative to restore coastal wetlands in Louisiana is, in our judgment, very compelling.

We believe that S. 630 can and should be improved before enactment. We have reviewed the text of the proposal and we have attached a memorandum that was made available to your staff earlier, providing a series of recommendations on possible provisions to strengthen the bill.

These would generally be summarized as tightening key definitions to clarify the scope and content of the coastal restoration program. We believe, for instance, that the bill ought to state with precision just exactly what a coastal wetland project is. We are not interested in supporting legislation that would create an open-ended opportunity, for want of a better term, for pork-barrel type projects, even if undertaken ostensibly in the interest of the environment.

There is a fundamental interest that conservationists have here in making sure that the limited resources that are available for natural resources generally and for wetland protection in particular are carefully targeted to activities that will produce the most bang for the buck.

We are confident that the Corps, EPA, and the State working together can find many opportunities for cost-effective proposals for wetland restoration and protection. We think the bill ought to be framed to establish those as priorities.

We also believe that there should be immediate improvements in the Federal regulatory programs that operate in coastal Louisiana. By our count, under the terms of the bill as introduced, it could be four or five years before the State planning process is completed and approved and the effects of the bill are really seen on the ground. During that period, we could see losses of wetlands of 150,000 to 200,000 acres. We believe that the ongoing Federal activity in permitting in coastal Louisiana, where scores of permits are being issued, amended, or revised on an annual basis, should be subject to specific statutory requirements right now to achieve the no net loss standard.

We would also be looking for greater non-Federal financial contributions and other measures to reduce Federal costs and target financial resources more efficiently. We certainly have an interest in seeing this program operate to the greatest efficiency possible.

Mr. Chairman, these improvements will help ensure that tax dollars are spent wisely, that permits are issued judiciously, and that environmental values are maintained to assure that Louisiana's coastal wetlands are protected.

That concludes my statement, Mr. Chairman.

Senator BREAUX. Thank you.

Mr. Hayes.

STATEMENT OF ROBERT G. HAYES, NATIONAL COUNSEL, COASTAL CONSERVATION ASSOCIATION

Mr. HAYES. Thank you for inviting us here today.

I am Bob Hayes and I am the National Counsel for the Coastal Conservation Association. CCA now has about 45,000 members, 5,000 of which are in the State of Louisiana. We are active in nine coastal States, from Texas through the State of Virginia.

CCA is composed of sportsmen who are concerned about the environment and concerned about the reproductive capabilities of our wetlands throughout the Gulf and the entire United States. We support this bill and we commend you, Mr. Chairman, and your efforts to highlight this important issue.

This issue is particularly important to the long term viability of our nation's marine resources, and we believe it is an issue which is a national problem. CCA is an unusual organization in the sense that it has 60 or more chapters, spread around nine different States, and each of those States is essentially independent from the others. There are very few issues which CCA can come together on nationally and support, particularly issues that have a regional or local impact. This is one of the issues that they can and do feel very strongly about.

We think there are several components of the problem and several parts of this bill that are important nationally. One is the concept of a State/Federal partnership to bring together the planning and implementation process between the Federal Government and its 404 activities and the State in its efforts to address wetlands loss.

Secondly, one of the principles which CCA has espoused for a number of years is the delegation of the authority to manage specific local problems to the lowest possible level of government. We think it is extremely important to have States actively involved in permitting processes like this one. We think that there is a role for the Federal Government here, but that the role must be subservient to the State where the State has a specific responsibility and where they are considerably closer to the problem.

Finally, we would like to say we think the principles established in this bill will have application to wetlands all over the United States. We would like to commend Senator Breaux for his effort and tell you that the Coastal Conservation Association fully supports it.

Senator BREAUX. Thank you very much, Mr. Hayes.

Dr. Kemp.

STATEMENT OF G. PAUL KEMP, EXECUTIVE DIRECTOR, COALITION TO RESTORE COASTAL LOUISIANA

Mr. KEMP. I am Dr. Paul Kemp, the Director of the Coalition to Restore Coastal Louisiana, a non-profit citizens' coalition which has grown since 1986 to include over 80 membership organizations which support our goals of coastal restoration. These include churches, chambers of commerce, civic groups, businesses, Native Americans, villages, trade unions, landowners, and both the national and local chapters of the major conservation organizations.

Clearly in Louisiana and South Louisiana, restoration of the Mississippi Delta is about more than saving wetlands. It is about lives, livelihood, and cities and towns that will not be there if we do not do something.

When we talk about the cost of restoration, we also need to bear in mind the cost of not restoring, the cost of all that loss of infrastructure in all the cities and towns which exist in this very populated wetland region. There are two million people living in the wetlands of the Mississippi River Delta.

My background is that of a research scientist and consultant to industry and government on sediment transport and deposition. My own research and that of colleagues in the Netherlands have led me to understand that the current waste of wetlands in Louisiana is both unnecessary and to some degree reversible. I can address some of the technical questions that were raised earlier.

We are told by some that the natural process of subsidence coupled with the new threat posed by greenhouse-related sea level rise must inevitably spell the end for the wetlands of the Mississippi River Delta. This argument ignores the unique natural ability of wetlands to adapt to sea level changes by growing upward if supplied with sufficient sediment, which is kind of an unusual property of the wetlands, and secondly, the rapidity with which the wet-

lands have deteriorated as a result of human modifications in this century.

The unprecedented rate of land loss over the past 40 years is a clue that man's activities do make a difference, and by the same token, that corrective measures might also quickly bear fruit. You have heard about how the river is leveed to its mouth. Maybe you have not heard about the 8,000 miles of canals that completely dissect the Mississippi River Delta.

One thing to remember is that future development of the OCS offshore industry means that there will remain in the future the pressure to dredge new pipeline canals through the Delta, while the old ones, now virtually abandoned by the industry, continue to enlarge without control.

Louisianians, along with the rest of the Nation, have certainly enjoyed benefits from the largely Federal expenditures for flood control and navigation and from private oil and gas extraction activities conducted in the national interest. It is becoming clear, however, that the incidental consequences of managing the Mississippi River Delta, solely for these purposes, amounts to a de facto management for maximum wetland loss.

Proactive efforts to divert the river water and sediments back into the wetlands must inevitably be the cornerstone of any long-term plan to preserve the Mississippi River Delta. Only then will other activities, such as restoration of damaged wetlands by backfilling canals, by stabilizing coastal barriers, and so on, stand a chance of long-term success.

Furthermore, once a substantive national commitment has been made to the Delta—I tend to use the phrase, Mississippi River Delta, rather than, Louisiana, because this is the only deltaic land mass in the U.S. and it is worth preserving, just like the Everglades or the Grand Canyon. Once a substantive national commitment has been made to the Delta, then it will be reasonable to ask that Louisianians protect this investment in return through imposition of tighter regulatory controls on wetland development activities.

This is the spirit in which Senator Breaux has offered this bill, and this sentiment enjoys wide support throughout Louisiana. It must be remembered that the history here is one of a very two-faced Federal approach to wetlands in Louisiana. At the same time the direct or indirect Federal actions have hastened the loss of all land in the Delta, the Federal Government has asked individuals and local governments to severely limit uses of wetlands for anything but oil and gas extraction.

The achievement of a goal of no net loss of coastal wetlands in Louisiana will challenge our scientific and technical capabilities. I believe that it is a function of priorities. The goal of no net loss due to wetland development activities can, in contrast, be achieved quite rapidly if Louisianians believe the delta has a future and that they are not being abandoned by the rest of the Nation to face the advance of the sea alone.

We support several elements of this bill, particularly the strong role for EPA. Our experience in the past, although we have very intimate experience with the Corps, is that public involvement tends to be minimized in Corps procedures. That has been the case

to date in their comprehensive plan, where EPA tends to have more of a role for public involvement. We also need to have EPA essentially certify that these restoration efforts are environmentally sound.

Therefore, we would argue for a Federal/State partnership with EPA assuming a very strong role. We applaud Senator Breaux' initiative in this regard.

I would be glad to answer any questions. Thank you.

Senator BREAUX. I thank all three of the panel members for your comments and suggestions.

Mr. Osann, you talk about restoration projects and feel that a tighter definition of the type of wetland restoration projects that the bill would call for should be provided. The intent certainly is to have coastal wetland restoration projects aimed at doing exactly that, restoring the lost wetlands. We do not want to be so tight in the definition that we omit projects that are conceived of which we may not know about today. We want to make sure that they will be able to be approved projects.

You point out in your memorandum that the projects should be specifically defined to include freshwater diversion projects, sediment diversion, and similar types of projects. We are doing a lot of that now. But you specifically suggest that we exclude levees, sea walls, and similar structures used for creating impoundments. Would you elaborate on that?

Mr. OSANN. There has been some concern with the impoundment of wetland areas. I think that it is a technique that is not universally acclaimed in the State.

You raise a valid point about trying to accommodate the results of innovation and technological improvements over the coming years. Certainly, we would be willing to work with you on some language to do that.

Senator BREAUX. Let's have some discussion about the concern that Senator Chafee has and some of the Federal agencies had different signals on. With regard to the delegation of the permitting program to the State, again, that is not something that I thought of. It is the recommendation of the National Wetlands Policy Forum.

If the legislation was amended by adding language to continue the 404(c) authority of EPA with regard to permitted activities, and knowing that the legislation envisions a far broader system than we currently have in the sense that it is all developmental projects, not just dredge and fill, and that there is a new standard for those permits, one of no net loss, which is not there now, then how do you feel about that, if that were to be done?

Mr. OSANN. We felt that there were some practical problems with implementation as envisioned by the bill as introduced. There are some new standards that the State program would have to meet and the Federal review of that program would take place at the outset. Army and EPA would have to approve the plan before the State could assume this role.

As I said, even during recession, this is an area where permitting activity is very active. The concern we have is the practical monitoring and enforcement of what may appear to be an excellent, good quality, and good faith effort on the part of the State at the

time the plan is prepared. But how is it going to be implemented year after year and permit after permit? That is a major part of our concern.

Senator BREAUX. Mr. Hayes, any comments?

Mr. HAYES. We think that the suggestion that has come up here this morning of applying the 404(c) requirements makes some sense. You have a Federal overlay; you have the ability of the Federal Government, certainly, in natural resources of all kinds, to cooperatively enforce not only State permits, but Federal permits.

I think that State/Federal partnerships of this type work very, very well. I think that it is a matter of getting the State of Louisiana and the Federal Government together to get them to cooperatively develop a plan, and then draft legislation which would ensure that it happens.

Senator BREAUX. Dr. Kemp, do you have any thoughts about that?

Mr. KEMP. The thought is this: the 404(c) has been exercised primarily in the abstract up to this point. We now see EPA starting to exert itself fairly aggressively in use of the 404(c), their essential veto.

We applaud them for doing that, but let's look back at the history. The 404(c) has had virtually no impact in Louisiana up to this point.

Senator BREAUX. That is a very good point. I have had many hearings where they have pointed to the fact that they have exercised authority in only a handful of instances. We cannot say that because the Federal Government does it, they are going to do it better than anybody else. That is hardly the track record.

Under the current program, we are losing 55 square miles per year. That is hardly an indication that everything is fine on the Federal level. We better start involving the State a lot more than we have so far.

Mr. KEMP. One more comment is that I think what has been missing up to now is any sort of proactive effort, anything on the other side. I think that is what your bill does and that is what is necessary. I think that with that kind of national commitment we can see some things really move forward.

Senator BREAUX. Senator Chafee.

Senator CHAFEE. I want to thank each of you for your testimony.

Mr. Osann, I thought the points you made were very good ones. Anytime you find someone that makes points that one agrees with, they are always considered excellent points.

Mr. OSANN. Very incisive.

Senator CHAFEE. Yes. I think that where you discuss some improvements that could be in this legislation, tightening the key definitions, improvements in existing Federal regulatory programs, strengthened Federal oversight, and greater non-Federal financial contributions—all of those are things we have been discussing here over the balance of the morning.

The point you make about these projects not automatically receiving a favorable cost/benefit ratio and your explanation of how that came about is very interesting. Apparently the past Administration based it all on what you might call national economic de-

velopment benefits without considering any of the environmental quality benefits?

Mr. OSANN. Yes.

Senator CHAFEE. If environmental quality benefits can be financially categorized—I presume you believe they can, that a dollar figure can be put on them?

Mr. OSANN. Some of them can, yes.

Senator CHAFEE. I think that is fine.

Mr. Kemp, the point you made about calling it the Mississippi River Delta rather than Louisiana is a good point because it is more than Louisiana that is involved here. It is a national problem.

I also think it is important that you stress that the value in this is not solely in preserving wetlands for fisheries or wildlife. It affects the towns, villages, and cities involved.

As this legislation goes on, there is inevitably going to be a clash between the economic development interests and the interests seeking to preserve these wetlands. For example, I believe you pointed out that the gas and oil people had built trenches and now they have moved from there and want to build more trenches for their equipment and pipelines to go through.

There, you are going to have a clash. What is going to happen?

Mr. KEMP. We have a clash right now, but the clash is all on one side. We are strictly in the regulatory mode. We do not have any possibility of any nourishment or sustaining of existing wetlands.

I think that one reason that this sort of negativism pervades all the landowners and the people who live down there is that they have watched over the years as their wetlands, the whole area they live in, has basically fallen apart without ceasing. They have also watched some hypocrisy. The only people right now who can get permits to do anything are those who want to put in oil wells and that sort of thing.

Senator CHAFEE. But obviously, that produces a yield for the State and presumably for the local communities.

Mr. KEMP. Of course, most of the industry is moving offshore now, so it is less and less in the wetlands itself.

What we are seeing is that if we do go into a program where we can actually create and restore wetlands, then there is actually a future for 50 years down the road. Right now, Louisiana is looking at the wetlands, knowing what they have seen for the past 50 years, and what they expect to see in the future is that it will be open water.

Senator CHAFEE. They can not object too much because they have countenanced it for many years, obviously. They all have votes, and they must like the present system.

Mr. KEMP. That is not what my organizations are saying. I represent organizations of people who live in the wetlands, and those people—yes, there has been a ground shift of attitude. You are right about that. I think that should be recognized.

It is recognized in the kind of legislation that has been passed recently in Louisiana. There is a change, and I think that changed should be recognized by the Federal Government also.

Senator CHAFEE. Thank you.

Thank you, Mr. Chairman.

Senator BREAUX. Dr. Kemp, I think that what you were pointing out is that the permitting program of the past has always permitted activities that have had some impact, sometimes negative, on the wetlands, but that this legislation, for the first time, would actually provide for permitting of restoration activities, things that are positive, and things that rebuild wetlands. Isn't that one of the points you were making?

Mr. KEMP. That is right. What this legislation does is give people in South Louisiana hope that there could be a future for the Mississippi Delta.

Senator BREAUX. I appreciate your statements and your coming up from the State. I think the suggestions have been helpful.

The bill is not intended to be the final word. It is a starting point, but it is one that does more than suggest that we study the problem. It talks about some proactive activities in the sense of a new permitting approach as well as proactive restoration of the coastal wetland projects, which is absolutely needed.

We need much more than just stricter permits. We need something that is actually going to restore and rebuild, and I think this legislation is a beginning in that direction.

We are going to recess for a vote and come back to take the final panel.

[Recess.]

Senator BREAUX. The subcommittee will come to order.

Our final panel consists of Mr. Leighton Steward, Louisiana Landowners Association; Mr. Martin Cancienne, Louisiana Farm Bureau; and Mr. Vernon Berhorst, representing the Gulf Intracoastal Canal Association and a number of other interests that he has worked with over the years.

We are delighted to have all three of you good friends who have worked on this problem. Let's begin with Mr. Steward.

STATEMENT OF LEIGHTON STEWARD, LOUISIANA LANDOWNERS ASSOCIATION, ACCOMPANIED BY BILL BERRY, DIRECTOR OF ENVIRONMENTAL AFFAIRS AND SAFETY

Mr. STEWARD. Thank you, Mr. Chairman and Members of the Committee. I am Leighton Steward, Chairman and CEO of the Louisiana Land and Exploration Company or LL&E, as we call it. With me today is Bill Berry, our Director of Environmental Affairs and Safety.

I certainly appreciate the opportunity to appear here as a representative of both the Louisiana Landowners Association and LL&E. The Louisiana Landowners Association represents private parties that own 1.6 million acres of these valuable Louisiana wetlands.

As you properly pointed out, Louisiana has 40 percent of the coastal wetlands in the entire United States. I would like to mention that LL&E owns over 600,000 acres of these wetlands, which makes us the largest private owner of wetlands in the United States.

We landowners are vitally interested in these critical wetlands issues. LL&E has recognized the wetland loss and has been practicing conservation since the early fifties. We have been spending about $1 million per year since that time doing something about

coastal wetland loss. Based on our experience and observations over the years, let me share some general thoughts on this serious matter and then, specific comments on S. 630.

The National Wetlands Policy Forum recently released a report, the heart of which was no overall net loss of wetlands. This goal has been adopted by President Bush, the EPA, and is also in proposed legislation.

Although this is an admirable goal, it is impossible to achieve for the foreseeable future. Let me expand on that.

As has been pointed out, the major cause of wetland loss in Louisiana is sediment starvation. There is a natural ongoing geological process that is now tremendously exacerbated by the leveeing of the Mississippi River. This man-made leveeing channels all sediments from the central U.S. and Canada into deep waters and no new land is being built by the Mississippi. A small amount is being added by the Atchafalaya.

Let's look at the current conservative coastline projection for where it is going to be in the next 50 years. This was done by the Corps of Engineers. If I may, Mr. Chairman, I would like to give this presentation with the charts we provided here.

First is the Corps of Engineers projection of where the Louisiana coastline is going to be 50 years from now. In the areas of red—this is all going to be gone. Before I finish this, I hope that what I have to say will prove to you that if not one more canal or anything else is done in coastal Louisiana, this land is still going to be gone.

What I would like to do is give you a little factual, historical perspective on this and tell you how the Mississippi Delta was formed and how it has come and gone over the years. The Mississippi Delta is comprised of sediments that come from 32 interior States of the United States as well as Southern Canada, and all of those sediments that come from these major river systems feed out through the mouth of the Mississippi River.

That is where our 7,000 square miles of Mississippi Delta has come from over the last 7,000 years. I say 7,000 square miles because the Gulf of Mexico was once smaller than it is and 7,000 years ago, sea level rose to its present position.

This shows the Mississippi Delta in a much more blown-up area as it looks today, or as it looked yesterday. It is disappearing so rapidly that it may not look the same today. What I want to do is tell you where the Mississippi has been these past 7,000 years and what the implications are from that.

Seven-thousand years ago, when sea level rose to its present position, the Mississippi occupied the area called the Teche Delta. The Teche Delta built out into the Gulf of Mexico a lot further than where the current coastline is. In fact, there are shoals offshore that are old footprints to prove that the delta was once out there because it is really shallow water.

The maximum build-out here occurred about 2,500 B.C., which was about the time that the pyramids were being built. The river then jumped its bank and moved to the east to form the St. Bernard Delta. Then the St. Bernard Delta moved out even eastward of where the Chandeleur Islands are today. They are the old footprints of the St. Bernard Delta.

How do we know all of this? We know it from core holes. The Corps of Engineers started working on this project in the forties. A lot of work was done in the forties and fifties. Some of the oil companies have continued to drill core holes and track these old deltas. This was happening about the time of the first Olympic Games.

While this delta was being built, this land in the Teche Delta began to sink and compact. It is very immature soil that is spit out by all this drainage in a very short amount of time and it simply compacts once it has been sitting there for awhile.

The third movement of the Mississippi built the Lafourche Delta. It moved toward the St. Bernard Delta and as it did, the St. Bernard Delta began to recede as the old Teche Delta began to recede.

Then finally, about 600 or 700 years ago, the Mississippi moved into its modern delta, which we call the Bird's Foot Delta, that extended way out into the Gulf of Mexico. That is where it is today. These old deltas have continued to subside and compact while the Mississippi has been in this course. All this occurred before man ever set foot on the Mississippi Delta.

As Murphy's Law would have it, about 100 years ago when we built all the levees to protect lives and give navigation for the Mississippi River, we trapped the river so that all of the sediments from these interior States now spill into very deep water.

The next chart is a smaller scale version to show what is left of the Mississippi River today and how large it was with all of the four movements. That land is all gone now, 7,000 square miles of land that has been removed by Mother Nature before man ever set foot on the Mississippi River Delta.

An earlier comment about these marshlands moving inland and regenerating, once they disappear—that is really not very practical here because the land that is up here is much older land that has already gone through a compaction phase and it is very difficult to build new wetlands on high, dry ground.

Next, we see where the Mississippi is trapped today. This is the past 600-year course of the Mississippi. It is all being dumped out into water that is generally over 350 feet deep and it is sloughing into the 10,000 foot waters of the Gulf of Mexico. As long as the river is trapped here and no new sediment is coming in, regardless of what we do, we are going to lose a lot of wetlands.

Let me now say that although it is a very admirable goal, because of these studies and the facts that have been dug up over the past 50 years here, I would submit that no new studies need to be done on that. This is all historical fact.

The no net loss, we really believe, is not an immediately achievable goal. You can not build wetlands inland on high, dry ground. Other factors, such as navigation canals and oil field canals have contributed to local wetland loss, but we landowners know that the biggest problem is caused by the natural compaction and sediment starvation caused by leveeing the Mississippi River.

All officials, individuals, and agencies that have anything to do with Louisiana's wetland preservation action must understand these megafactors when considering such remedial actions. Deltas all over the world have this ever changing problem. It is simply hydrologic and soil mechanics principles at work.

I would like to refer to some booklets we have presented and we also have a 14 minute video tape. We are not going to show that right now, but I would urge anyone interested in this to please look at those.

Quickly on your bill, S. 630—Senator Breaux, we certainly commend you for the leadership in crafting this bill and we certainly endorse it generally, particularly having the wetlands administered by a single agency. The dual State and Federal permitting scheme tends to discourage, rather than encourage, marshland conservation projects.

We know. It took us 14 months to get a permit to simply maintain our over 300-plus coastal erosion control structures. The barge that did that, simply for maintenance, sat idle for 14 months while our wetlands, the country's wetlands, continued to disappear.

S. 630 should help rectify this situation, but it would help if we could develop now, not four years from now, some kind of one-stop permitting. We think it will take over four years even under S. 630 to get this accomplished, and meanwhile, the wetlands will continue to disappear. We support revising the Corps of Engineers' mission to raise the priority of wetlands protection, restoration, and creation.

On revision to S. 630—we think that private landowners who own 75 percent of Louisiana's wetlands should have some role in development of a plan. We should have some valuable input to contribute, not just an after the fact comment and review period. We are more than "the public." We are directly interested parties. We believe that financial incentives should be given for wetland protection projects.

Finally, on no net loss, S. 630 is more realistic than that of the National Wetlands Policy Forum because S. 630 applies only to developmental activities. This is not realistically achievable for a project of any length of life in the Mississippi Delta for the reasons that I mentioned earlier.

You can not completely eliminate development losses without eliminating development altogether. I do not believe it is the intent of the legislation to completely stop development, so we support a multiple-use policy that recognizes development rights while assuring appropriate wetland conservation.

Mr. Chairman, I would be happy to answer any questions. The Louisiana Landowners Association and LL&E are always available to work with you or any agencies in this very important environmental matter. Thank you.

Senator BREAUX. Thank you very much, Mr. Steward.

Mr. Berhorst.

STATEMENT OF VERNON BERHORST, GULF INTRACOASTAL CANAL ASSOCIATION

Mr. BERHORST. Thank you, Senator Breaux.

I would like to point out that these statements I will make are on just the navigation, ports, and waterways aspect of wetlands and nothing else.

On behalf of the organizations that participated in preparing this statement, I extend our thanks for the opportunity to share our

views. Ten organizations have joined together in preparing this statement.

Those that are here today are the American Association of Port Authorities, the American Waterways Operators, the National Waterways Conference, and the Gulf Intracoastal Canal Association. The others are listed in my prepared text.

We all have a direct and vital interest in the management of Louisiana's coastal wetlands in a manner that will ensure sustained productivity of this important resource. The task before us is to craft legislation that will achieve the purposes of S. 630 while assuring that Louisiana's ports and waterways continue to serve their intended function. This can be done, and we are here to help.

Our concern and involvement in wetland issues can readily be understood from the fact that most of the cargo carried by ships and barges moves over natural and man-made waterways passing through coastal wetlands. This is best illustrated by the Gulf Intracoastal Waterway which passes through coastal wetlands for almost all of its 1,200 mile length from St. Marks, Florida to the Mexican border. Furthermore, within Louisiana's coastal wetlands, we have the juncture of the GIWW and the Mississippi River, the major waterway crossroad on planet Earth.

The waterway network branching out from this crossroad is a major contributor to our nation's competitive position in foreign trade, especially in grain and coal. Twenty-two thousand jobs are generated by this network at the Port of New Orleans alone, and thousands more in factories, mines, and on farms throughout our nation depend upon it.

The magnitude of the tonnage of cargo moving through these wetlands is comparable to that of the wetlands themselves. In 1987, two billion tons of waterborne commerce passed through our ports and over our nation's waterways. Somewhere along its journey, almost every one of these two billion tons passed through coastal wetlands or over rivers fringed by wetlands. This is not a phenomenon of recent history. This has been the case since man realized the ease and economy of transporting himself and his belongings on objects that float.

In Louisiana, approximately 500 million tons of waterborne commerce pass through. Succinctly stated, 25 percent of our nation's foreign and domestic waterborne commerce passes through an area containing 40 percent of the nation's remaining wetlands. These two statistics explain very clearly why we want to be involved in today's dialogue and why we must be full partners in the development and implementation of the management program proposed in the bill before us.

The immediacy, the immensity, and the complexity of the task demand that all work together. Those involved in ports, waterways, and water transportation endeavors possess knowledge, talents, and experience in certain fields. Others have different capabilities.

These resources must be collectively applied to the task before us. Within our organization are many who are willing to participate in this area.

With regard to participation, I wish to note that S. 630 is not explicit other than, "Assuring an opportunity for comment and review." Comment and review are after the fact provisions.

Three groups involved in wetlands—agriculture, landowners, and ports and waterways—are on this panel. A workable plan depends upon our participation in the planning process, not just in comment and review.

In 1966, I personally participated in an earlier effort to develop a plan for multi-purpose wetland management in Louisiana. Congress authorized the Louisiana Coastal Area Study, which is still the primary vehicle for Corps of Engineers participation in wetlands management in Louisiana. We are miles ahead in developing a plan because of this authorization. It was a forward step, but improvement is needed.

Clear authority for the Corps of Engineers to participate in wetlands projects is essential. It is contained in Section 15 of S. 630 which provides for, "Equal priority with projects relating to navigation and flood control."

By clearly giving wetlands projects this status, their merits, benefits, and cost can readily be assessed and sources of funding identified. This is of great concern to us because of budgetary constraints which apply to Corps of Engineers' funds appropriated out of the general revenues of the Treasury.

Under this condition, operation and maintenance funds are especially vulnerable to being diverted to other purposes. Here is the Appropriations Bill. In it, $1.3 billion is for O&M and only $1 billion for construction of Corps projects of navigation and flood control. Of course, it is very easy to put those off and say, "We are going to do the maintenance in subsequent years."

A portion of the revenues derived from the mineral activity on the Outer Continental Shelf as provided for in S. 630 can be a sustained source of revenue for the construction and operation of wetland management projects.

I would also like to remind you that the private sector is contributing to the construction, operation, and maintenance revenues. In the current Corps appropriation, $119 million is being allocated from the Inland Waterways Trust Fund and $164 million from the Harbor Maintenance Trust Fund. These trust funds are supported solely by private contributions.

Wetland projects and navigation projects can complement each other. Water and sediment diversion, use of dredged material for marsh creation, and structures for marsh management and prevention of salt water intrusion are examples of this that are already taking place. Fresh water is being diverted from the Mississippi River, and projects are being planned to divert water from the Intracoastal Waterway in western Louisiana. In this same area, navigation locks provide for water management in the marshes of the Mermentau Basin and prevent salt water intrusion.

By illustration, the Corps of Engineers has already created 25,000 acres of wetlands with dredged material, 3,000 of these in the State of Louisiana. They plan on creating 40,000 additional acres. A great opportunity exists here for beneficially using much more of this material.

Using funds from the Wetlands Conservation and Restoration Fund to pay the additional cost of transporting dredged material to areas where it can be used beneficially, will facilitate piggy-backing on established Corps dredging programs. In places where sites for

dredged material already are limited, this would provide added benefits.

Section 10 of the bill provides that regulatory programs developed by the State shall supercede the provisions of Section 404 of the Water Pollution Control Act. This could be a vehicle for redoing the regulatory program, at least in coastal Louisiana, where the greatest number of 404 permits has been issued.

We must improve the 404 program; 404 is simply not working as a wetlands management tool. There is no guidance in this 404 action. This was brought out before. When we go out there and put in a small structure, we spent up to 10 or 15 years in one case, where it took that long for the Fish and Wildlife Service and the Marine Fisheries Service to decide how much wetlands is going to be salt water and how much is going to be fresh water. This simply has to be changed, and the plan which you have contained in your bill can be a remedy for this.

Furthermore, whatever is done, there must be reliability and predictability in the regulations developed. Investments in public port facilities, private terminals, and equipment are long-range capital investments. Without reliability and predictability, attracting investments where these conditions exist will be difficult.

The Port of New Orleans is preparing plans for a $187 million capital improvement program. They are entitled to reasonable assurance that regulations will not unduly delay or hamper this program which is so vital to the port's future. Others can be expected to accept no less.

These major areas of concern to us must be addressed in the drafting of the legislation itself, as the legislation contains guidance for program development, implementation, and ongoing operation. We present these concerns based upon collective experience, to aid you in developing legislation that will provide a viable wetland management program while assuring viability of the water transportation infrastructure associated with these wetlands.

Our interest and that of the public will be best served by a cooperative effort. S. 630 can be the starting point for this effort.

Thank you.

Senator BREAUX. Thank you, Mr. Berhorst.

Mr. Cancienne.

STATEMENT OF MARTIN CANCIENNE, LOUISIANA FARM BUREAU FEDERATION, BATON ROUGE, LA

Mr. CANCIENNE. Thank you, Senator.

My name is Martin Cancienne and I presently serve as Second Vice President of the Louisiana Farm Bureau Federation. I am also a sugarcane farmer by trade, from Assumption Parish.

Thank you for the opportunity to present the views of the Louisiana Farm Bureau Federation pertaining to S. 630, the Louisiana Coastal Wetlands Conservation and Restoration Act. We have submitted a written statement for the record, and I will summarize in the interest of time.

I would like to begin by indicating the LFBF believes that something definitely must be done to both minimize and turn back the clock on future coastal wetland losses in Louisiana, and we com-

mend you, Senator Breaux for your efforts in this direction. The Farm Bureau has had a long-standing policy regarding coastal zone management which states that Farm Bureau work in cooperation with other groups to draft legislation acceptable to agriculture which addresses the coastal erosion problem.

We have talked about this all morning, about the coastal land loss in Louisiana and how it is continuing in catastrophic proportions. Since the beginning of this hearing this morning at 9:30, I think we have lost over 10 acres of land in the past three and a half hours. The problem is there; I think everyone is in agreement that the problem is there. It is just that the problem has got to be solved.

Wetland loss along the coast threatens valuable agricultural land which has been in production for decades. Some of the crops we produce along this area are rice, sugarcane, soybeans, citrus, cattle, crawfish, and of course, the marine fisheries industry. From an agricultural standpoint, it does not only involve agrarian aspects, but also involves aquatic agriculture, which is becoming a big player in the scheme of things in Louisiana. Louisiana wetlands also provide wintering habitat for 66 percent of the migratory birds using the Mississippi Flyway, supporting a recreational hunting industry worth $58 million annually.

We in the Louisiana Farm Bureau support the maintenance of the private property rights of U.S. citizens to make whatever use of their property they want as long as it does not adversely affect the property rights of others. In any discussion about wetlands protection, it is helpful to remember that for much of our history, wetlands have been viewed as a problem to be eliminated rather than a resource to be protected.

It should be realized that regulatory programs alone will not halt wetland alteration or deterioration. Instead, emphasis on increased economic incentives to landowners, such as wetland reserves, easements, and cost sharing for restoration should be considered. This approach should promote cooperation rather than confrontation. In addition, increased information and education to wetlands owners on the significance of wetlands will promote public awareness and understanding.

The wetlands found along our coastline are unique to Louisiana. Nowhere else in the United States will you find such an ecosystem. For this reason, we recommend that any definition or interpretation used in defining exactly what constitutes a wetland be broad in nature.

Currently used definitions vary not only among and within Federal agencies, but at all levels of government. It is unrealistic to think that it would be possible to achieve one single definition that will be applicable to cover all regions of our nation. Much of the fertile agricultural crop land located in the coastal parishes would probably be classified as wetlands if the same interpretation used for designation of a wetland in the Midwest were applicable to Louisiana.

We recommend that the USDA Soil Conservation Service be empowered to make all wetland determinations. Also, Farm Bureau strongly supports the existing section 404 exemptions for agriculture as contained in the Clean Water Act.

The proposed law states that the governor shall designate a single agency or authority whose purpose will be to develop and administer a plan to restore the coastal wetlands within the State. It is our recommendation that the Louisiana Department of Natural Resources be the designated State entity. This department already has the experience and expertise to carry out the mandates set forth in this legislation.

Once the State's proposal for restoration is completed, it must then be submitted to the Secretary of the Army and the Administrator of the Environmental Protection Agency for their approval. Prior to the initial meeting of the designated State authority, we recommend that an advisory council, made up of the various State entities, including a representative from agriculture, be formed on the State level. The purpose of the advisory council would be to allow for input from the respective State entities into the development of the specifications to be incorporated into the proposal.

In closing, I believe that the agricultural production in the coastal regions of our State can be maintained at current levels while not having any bearing or adverse effects on the past or future deteriorations of our coastal wetlands. As I alluded to earlier, agriculture only stands to lose if this problem is not swiftly and effectively addressed.

Louisiana needs assistance as it strives to develop and implement a wetlands preservation agenda. Without Federal assistance, Louisiana's coastal wetlands, which provide extensive national benefits, will be lost forever.

I again commend Senator Breaux for his insight into realizing the magnitude of this problem. Farm Bureau offers its assistance in helping you solve this problem.

Thank you.

Senator BREAUX. We thank all the members of the panel.

I note that Jim Tripp from the Environmental Defense Fund has returned.

Jim, do you want to come and summarize your thoughts about the legislation?

STATEMENT OF JAMES TRIPP, GENERAL COUNSEL, ENVIRONMENTAL DEFENSE FUND

Mr. TRIPP. Thank you, Senator Breaux, I apologize for having to leave earlier.

I care deeply about coastal Louisiana, having done a considerable amount of work in your good State in the 16 years that I have been at the Environmental Defense Fund.

Coastal Louisiana, the Mississippi Delta, is a national resource, no doubt about it, and it should be recognized as such. It should be viewed to be as important as the wetlands of Alaska, for example, or the Grand Canyon.

The high rate of wetland loss there is a national biological and geological calamity that should not be allowed to continue. Both the State and the Federal Governments have responsibility for what is going on.

What is the source of the Federal responsibility? They include the importance of the resource, the Federal role in the manage-

ment or mismanagement of the Mississippi River, which is certainly contributing to coastal land loss due to the lack of sediments, the Federal benefits that derive from oil and gas revenues, and also the talents and resources of the Federal agencies, such as the Corps of Engineers, EPA, and the Fish and Wildlife Service, to mention a few.

We can do something about it. Senator Chafee asked, "Is there something we can do?" The answer is clearly, yes, there is something we can do. This is a man-made problem we can respond to.

We welcome S. 630 as a vehicle to discuss this problem and try to come up with a legislative solution for dealing with it. We very much need a bill that focuses on coastal Louisiana and its peculiar problems, as your bill does.

We already have programs that deal with other specific estuaries, such as the Chesapeake Bay, but we should have Federal legislation that deals specifically with coastal Louisiana because of the shear size of the resource, the dimensions of the problem, and the fact that the solutions needed are unique, the solutions needed in terms of dealing with the sediment of the Mississippi River and fresh water diversion, the solutions that are needed in terms of alternatives so that we do not have to continue to dredge, fill, and drain the wetlands of coastal Louisiana. That is why we need such a bill.

We strongly support the general framework of S. 630. It clearly focuses on the problem and develops a framework for active Federal/State cooperation in developing a program of action that has to be implemented. From a broader environmental point of view, this bill can be viewed as a vehicle for trying to get the Corps of Engineers away from its traditional water resource orientation toward becoming an environmental engineering agency, which is in fact what this country desperately needs.

This bill is also a step in trying to make a reality of the President's commitment to no net wetland loss in one area of the country where it is extremely difficult to do it. There will have to be Federal dollars involved, whatever the source of revenue, whatever the cost sharing formula that is worked out, and the State is also going to have to make a financial contribution to all this.

In my opinion, to deal with this problem and to bring about restoration of coastal Louisiana, we will have to have one or more major sediment diversion projects. We are talking about big bucks here, and the Federal Government is going to have to play a major role in funding and designing that kind of project if it is ever going to come to pass.

In terms of an overall comment on the bill, in my view, your bill has got to encourage, foster, and promote what I would call a joint Federal/State partnership. The Corps of Engineers by itself should not be in the driver's seat. The Corps has to be involved, but we do not want just a Corps plan.

On the other side of the coin, we do not want just a State plan. It is going to have to be a joint product of the key Federal agencies with the State. There will have to be joint funding with heavy Federal funding, which we have indicated, and we would hope that we could find a source of revenue. If any of the other Senators have a

problem with the sources designated, we would hope that someone else would come up with some other ideas.

We do have a problem with the provision on 404 delegation as it is presently written, but I think that can be easily revised. In general, with those comments, we are delighted to see S. 630 introduced as a vehicle for encouraging, if not forcing, the Congress of the United States to deal with one of the most important resource problems that we have today.

Thank you.

Senator BREAUX. Thank you, Mr. Tripp, for your comments. I thank all the members of the panel.

Mr. Steward, you talked about it being impossible to meet the no net loss goal. What the bill is envisioning is no net loss due to developmental activities. We know that what you outlined so well is going to continue. If we did not do anything and if no development occurred at all, we would continue to lose wetlands in coastal Louisiana because of the nature of the system and the nature of the environment.

The bill envisions a goal of no net loss from developmental activities. It does not mean, site specific. If someone locates a well on a piece of property, there is in fact going to be some loss of wetlands in that area. There is no question about that. But the idea of mitigation for that particular site in some other location would be the offset that would end up with no net loss.

The no net loss concept as an overall total and the restoration projects are intended to compensate for the natural loss that will occur. Do you have any thoughts about that?

Mr. STEWARD. I certainly hope that you will be successful in coming up with 30 to 50 square miles of new wetlands every year that you will have to create. That is all I am trying to point out.

Senator BREAUX. That would not be the point. We are going to be losing an abundance of wetlands because of natural causes.

Mr. STEWARD. Right.

Senator BREAUX. There is no question about that.

Mr. STEWARD. We do not disagree about trying to look at each development project to see what it looks like on its own merits and on trying to have some mitigation there. We just do not want all of the different people that may look at the general broad provisions of no overall net loss to try to continue to build into these developmental projects the fact that you are having to compensate nationwide for it. I do not think that is what is intended in your bill. I would just encourage that, that issue should be very specifically addressed.

Senator BREAUX. I do not think we have any disagreement on that point.

Mr. Cancienne, I appreciate your statement on behalf of the Farm Bureau. You represent the landowners who make their living from the farm, and I believe it is very important for us to keep their needs in mind. I do not want to eliminate farming in Louisiana—I would be the last one to get myself in that position because it is not right.

Can the agricultural community live with the program that we are outlining here, in general?

Mr. CANCIENNE. As long as we can keep in place the exemptions from Section 404 of the Clean Water Act, and as long as normal agricultural practices can be continued. I do not think we have any choice, to be quite frank with you, Senator, because we already have problems with the intrusion of salt water in some places.

It is a major problem in the rice area. The water level coming up in some areas is causing problems. If we ever lose the coastal barriers, which seems inevitable if we do not do something, then we will have beachfront property instead of agricultural land. I do not think we need that in Louisiana.

Senator BREAUX. That would not help the agricultural community at all.

Mr. Berhorst, I thank you for your participation. You have been at it for a long time and have seen the devastation that has occurred over the years. I think the important point of making sure that the ports and harbors are not put at a disadvantage is well taken. We are going to make sure that we do not do that with this bill.

Mr. Tripp, thank you for your recognition of the fact that it is a national problem. This one State can not solve it.

I like Senator Chafee's concept that we should be talking about the Mississippi Delta problem as opposed to just a Louisiana problem because it truly needs a national focus. Your endorsement with your caveats is well appreciated.

I would hope that with the number of co-sponsors we now have that we would be in a position for the Chairman to move with a markup and hopefully see this bill on the Floor in a relatively rapid time frame.

I ask unanimous consent that a statement from the Lafourche Parish Council, in support of the legislation, would be made part of the record today. (See p. 158.)

I look forward to working with each and every one of you.

Mr. Steward, I think that LL&E is to be greatly commended. As a major landowner and a major energy company, I think your company has gone a long way toward perhaps, not changing the image so much as creating a very positive image about a landowner who is concerned about the loss and wants to do what is reasonable with regard to energy development while protecting the land at the same time. I think your company really stands out in that regard.

With that, this meeting of the subcommittee will stand adjourned until further call of the Chair.

[Whereupon, at 12:44 p.m., the subcommittee was adjourned, to reconvene at the call of the Chair.]

[Statements submitted for the record and the bill, S. 630, follow:]

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY
(CIVIL WORKS)

COMPLETE STATEMENT

OF

ROBERT W. PAGE,
ASSISTANT SECRETARY OF THE ARMY
(CIVIL WORKS)

BEFORE THE SUBCOMMITTEE ON ENVIRONMENTAL PROTECTION

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

U.S. SENATE

August 2, 1989

NOT TO BE RELEASED UNTIL APPROVED BY THE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
U.S. SENATE

DEPARTMENT OF THE ARMY

OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS)

COMPLETE STATEMENT OF

ROBERT W. PAGE

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENTAL PROTECTION

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

UNITED STATES SENATE

Mr. Chairman and members of the Subcommittee, I am Robert W. Page, Assistant Secretary of the Army (Civil Works). I am pleased to be here to discuss S. 630, the "Louisiana Coastal Wetlands Conservation and Restoration Act".

The principal objective of this bill is consistent with President Bush's initiatives to protect and preserve our wetlands and to adopt a national goal of no net loss of these important aquatic resources. We wholeheartedly support the President in this regard and as such are committed to the protection of the Nation's wetlands.

No Net Loss

The President has convened the Interagency Task Force on Wetlands under the Domestic Policy Council to establish and provide direction for the implementation of no net loss of wetlands as a national goal. I represent the Secretary of Defense on this task force.

While we support the basic intent of S. 630, we must oppose enactment of the bill. Our opposition is based on the mechanisms chosen to fund and implement the purposes of the legislation. Our specific objections are summarized in the following discussion.

Wetlands Regulation

As proposed, the permit program described by this legislation would regulate a much broader array of activities than currently regulated under section 404 of the Clean Water Act. We have always recognized that most

wetlands losses can be attributed to activities beyond the scope of section 404 and understand the importance of broadening regulatory authority in order to help ensure the success of any comprehensive state wetlands program. We support the bill's intent to provide an immediately effective mechanism for the state to protect its vital coastal resources; however, we believe it can be accomplished in way that preserves a strong consistent and equitably administered Federal section 404 program.

While we concur in the development and implementation of state wetlands conservation and restoration plans, we are concerned that certain critical components of the existing section 404 program have not been adequately addressed within the proposed framework of the bill. Further, the proposed legislation could set precedent to create piecemeal approaches to solving the Nation's wetlands problems rather than establishing a comprehensive national program. For the same reason, we oppose a $15 million grant program for Louisiana to develop a state plan. Neither the need for, or the amount of such a program has been established.

State Program General Permit

Rather than developing a state program to completely replace the Federal program, it seems from our past experiences to be more in both the Federal and State interest to dovetail these programs using a State Program General Permit (SPGP). This allows the state considerable authority and flexibility to regulate most activities within its jurisdiction but retains a relatively simple and proven mechanism for Federal action should the specifics of a particular case trigger a sufficient Federal interest in such things as navigation, national defense, or natural resources of critical national importance. Further, the SPGP can be used consistent with our other existing authorities to regulate coastal waters under Section 10 of the Rivers and Harbors Act of 1899 and Section 103 of the Marine Protection, Research, and Sanctuaries Act. Also, by retaining the existing 404 program the participation of other Federal agencies, such as the Departments of Interior, Commerce, and Agriculture, is preserved.

Project Formulation and Cost Sharing

We also are very concerned about those provisions of the bill related to state and Federal implementation of wetlands restoration projects in coastal Louisiana which exempt these projects from important plan formulation and cost sharing requirements. From our perspective, a plan to restore Louisiana wetlands would best serve both Louisiana's and the

Nation's needs if it were developed under these existing requirements.

Within the overall goal of restoring or preserving Louisiana wetlands, there will be many, perhaps conflicting, specific objectives to be defined, and alternative ways of contributing to those objectives. Plan elements contributing to those objectives should be formulated with close attention to cost effectiveness. We believe that the benefits of any proposed plan must be measured against the costs of implementing the plan. Notwithstanding this, we recognize that wetlands benefits are not easily quantifiable. In such cases where decisions regarding prioritization and selection of alternatives where economic benefits are not quantifiable, we believe that clear and consistent criteria should be used.

In addition, cost sharing requirements should not be waived. The Administration and the Congress worked hard to establish in principle and institute formally as National policy the idea that beneficiaries should share in the costs of projects. We should not now begin to undermine the hard work that resulted in consensus just three years ago. Moreover, the existing cost sharing process is working in coastal Louisiana. This reflects the reality that benefits are shared nationally and locally.

Comprehensive Coastal Wetlands Study

Under existing authorities, the Corps of Engineers has been at work developing a strategy to address wetlands losses in Louisiana. The New Orleans District of the Corps of Engineers has produced a Reconnaissance Report which would establish an interagency working relationship to identify and carry out appropriate wetlands projects. While we have not completed our review of the Reconnaissance Report, it appears that we will give it favorable endorsement with a few modifications. Those modifications would specify a prominent role for the Environmental Protection Agency and full partnership for the affected states. We would suggest that this study and its proposed management approach may be a useful prototype for other areas of the country.

In the feasibility study, the Corps and other Federal and State agencies will prepare a joint plan of structural and nonstructural alternatives that appear to be the most effective and efficient means of dealing with the coastal wetlands loss problem. The plan will recommend alternatives without regard to who should implement them.

The Louisiana Comprehensive Coastal Wetlands Study provides a timely and cost effective opportunity to address the crisis of coastal wetland loss in Louisiana. Lessons learned from this interagency effort can be very helpful in addressing coastal wetlands restoration, creation

and protection initiatives elsewhere in the nation.

Freshwater Diversion Projects

There are other coastal wetlands projects that I would like to describe briefly. The Corps of Engineers and the States of Louisiana and Mississippi are working to restore a small portion of the marsh flooding cycle in a way compatible with flood protection. The Corps of Engineers has studied three freshwater diversion projects to control saltwater intrusion in the Louisiana coastal area. These also will be addressed in the Louisiana Comprehensive Coastal Wetlands Study which I discussed previously.

Construction of the Caernarvon Diversion Structure, 15 miles south of New Orleans, began last June. It will provide a large volume of fresh water to the Breton Sound marshes. As a result, 16,000 acres of marsh will be preserved over the next 50 years. Construction is scheduled for completion in November 1990.

The Corps is engaged in ongoing study efforts for two similar proposed projects. The Davis Pond Diversion Structure on the west bank of the Mississippi River and the Bonnet Carre' Diversion Structure on the east bank, both a little north of New Orleans, would preserve 83,000 acres and 11,000 acres of marsh and wooded wetlands, respectively. Both of these projects are in the preconstruction engineering and design phase.

Future Initiatives

In closing, I want to note that the Army Corps of Engineers is a can-do organization. Since the late 1960's the Corps has been building an organization to respond to growing environmental concerns and fully capable of an interdisciplinary approach to environmental problem solving. The Corps now has as many professionals in the environmental and biological sciences as it has engineers. My view of the Corps role in solving wetlands problems goes far beyond its traditional regulatory mission.

At the same time, other agencies have primary statutory missions and expertise in this area. Thus, I do not see the Corps as leading the parade. Rather, I see them using their engineering, environmental, and management capabilities in support of a unified interagency effort. I have discussed this with Bill Reilly, EPA's Administrator. We look forward to improving our coordination efforts through participation in the President's inter-agency wetlands task force.

In addition, we believe it is critical to have full involvement and support of states and localities, both technically and financially. We believe any wetlands program will only be strengthened by state and local

involvement through technical expertise and by joint sponsorship of projects through cost sharing partnership arrangements.

Summary

Mr. Chairman, we are ready and able to provide environmental engineering support and oversight to stem the loss of our valuable coastal wetlands. While engineering solutions alone will not suffice, they must play a role if we are to protect existing wetlands from natural forces and unavoidable human impacts; restore degraded wetlands; and, create new wetlands to make up for past and future losses that will occur. We believe much of this technology is in place to accomplish this formidable task. The greatest challenge appears to be the long term financial commitment and public support this program will require.

Mr. Chairman, that concludes my statement. I would be pleased to address any questions you or other members of the Subcommittee may have.

TESTIMONY OF DEPUTY ASSISTANT SECRETARY MARYANNE BACH, DEPARTMENT OF THE INTERIOR, BEFORE THE SUBCOMMITTEE ON ENVIRONMENTAL PROTECTION OF THE SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS, REGARDING S. 630, THE LOUISIANA COASTAL WETLANDS CONSERVATION AND RESTORATION ACT

August 2, 1989

Mr. Chairman and members of the Subcommittee, I appreciate the opportunity to testify on behalf of the Department of the Interior regarding S. 630, the Louisiana Coastal Wetlands Conservation and Restoration Act. I am accompanied today by Scott Sewell, the Deputy Assistant Secretary for Land and Minerals Management.

As you know, the President and Secretary Lujan consider the loss of wetlands to be a matter of great concern. The President has established the goal of "no net loss" of our nation's wetlands and has called for a coordinated effort within the Executive Branch to deal with this problem. An interagency working group has been formed, under the auspices of the Domestic Policy Council and the Department has a key role in this Council's activities. The Council is actively reviewing existing laws and regulations and will make recommendations to the President on how a coordinated effort on the part of Federal, State local, and private sector can stem the loss of wetlands including the loss of coastal wetlands in Louisiana. Any such policy must foster Government and nongovernment partnerships.

My testimony today will reflect the national concern for wetland losses. Although the Department supports the intent of the bill to restore and conserve Louisiana's coastal wetlands, we are opposed to enactment of S. 630 for reasons I will elaborate on in

my statement. We note that the loss of coastal wetlands in the State of Louisiana is at a rate unique among other States and I will elaborate on the various activities the Department has on-going in the State. However, as a general policy, we do not advocate legislative approaches for individual States.

Louisiana's Coastal Wetlands

As the bill states, the vast wetlands of coastal Louisiana are of national importance to fish and wildlife resources. The 2.5 million acres of marsh and 637,000 acres of forested wetlands in that area comprise over 40 percent of the coastal wetlands in the lower 48 States.

Louisiana's coastal wetlands winter 20 to 25 percent of North America's puddle duck population. Conserving those wetlands is essential to achieving the goals of the North American Waterfowl Management Plan along the Gulf Coast. This area is one of seven key areas in the United States where "joint ventures" have been formed to facilitate the goals of the Plan by enlisting cooperative waterfowl habitat conservation efforts involving Federal, State, and private interests. As this Committee knows, the President and Secretary Lujan support the creation of a trust fund for Pittman-Robertson with the interest available for the Government share to be matched by the private sector to fund the North American Waterfowl Management Plan. Much of the best waterfowl habitat in the Gulf Coast Joint Venture Area is located in coastal Louisiana.

The Service has identified over 1.6 million acres of important waterfowl wintering habitat in coastal Louisiana. Louisiana's coastal wetlands also provide important habitat to many other migratory birds, including hundreds of thousands of wading birds, seabirds, and shorebirds. Endangered species that inhabit coastal Louisiana include the bald eagle, brown pelican, and peregrine falcon. Louisiana's coastal wetlands produce the Nation's largest harvest of fur animals and alligators. Those wetlands also reduce hurricane-related tidal surges.

Given the importance of Louisiana's coastal wetlands, the Department is concerned about the wetland losses in these areas. Wetland mapping efforts completed for the U.S. Fish and Wildlife Service in 1980 indicate that each year from the early 1950's to the late 1970's Louisiana lost about 50 square miles, or 32,000 acres, of its coastal wetlands. This represents over two-thirds of the national coastal wetland loss during that period.

Saltwater intrusion is also reducing the value of coastal Louisiana's remaining freshwater wetlands as habitat for wintering waterfowl and other wildlife. Continued wetland losses are expected to severely impact fish and wildlife resources of national and international importance, as well as the associated recreational and commercial uses of those resources.

Wetland Conservation Activities

The U.S. Fish and Wildlife Service is involved in a variety of activities to conserve Louisiana's coastal wetlands, including the

administration of six National Wildlife Refuges in coastal Louisiana, encompassing approximately 243,000 acres. Management of those refuges includes measures to preserve, restore, and/or enhance wetlands.

Under the authority of the Fish and Wildlife Coordination Act, the Service is actively involved in planning and evaluating water resource development projects carried out or permitted by the Corps throughout coastal Louisiana. The Service works closely with the Corps to plan projects intended to reduce coastal wetland loss, restore wetlands by diverting Mississippi River sediments, and restore historic salinity patterns in coastal wetlands degraded by saltwater intrusion. The Service is cooperating with the Corps, the Minerals Management Service, the U.S. Geological Survey and other Federal and State agencies to begin developing a comprehensive wetlands plan for coastal Louisiana. That effort is proceeding under the Corps' leadership as the Louisiana Comprehensive Coastal Wetlands Study.

Through its consultative role on Corps water resource development proposals and applications for Corps permits, the Service also recommends measures to mitigate the loss of wetlands. The Service's mitigation goal for wetlands is usually no net loss of habitat value. To achieve that goal, the Service recommends ways to avoid or minimize losses of wetland habitat values and to fully compensate for any unavoidable losses.

The Service also has an important consultative role under the Coastal Barrier Resources Act. With certain exceptions, the Act

generally prohibits Federal expenditures and financial assistance for development activities within the Coastal Barrier Resources System. Although eleven units of the System occur in Louisiana, Federal funding for erosion control and stabilization projects in Louisiana is authorized by section 5(a)(3) of this statute provided that these projects do not encourage development.

In recent years, the Service has been providing technical assistance to private landowners in coastal Louisiana to help them better manage their wetlands. The Service has also been encouraging and assisting the Agricultural Stabilization and Conservation Service and the Soil Conservation Service in the use of the Water Bank Program to restore and enhance coastal wetlands in southwestern Louisiana.

In 1989 the Service and the U.S. Geological Survey initiated a 5-year Louisiana Wetlands Loss Study. We expect that the results of that study will provide a better understanding of the critical processes of wetland loss and will help resource managers develop the best management practices for coastal wetlands in southeastern Louisiana.

Again, Mr. Chairman, let me emphasize that the Department recognizes the loss of Louisiana's coastal wetlands is significant and continues to threaten fish and wildlife resources of national and international importance. Although the Service is involved in numerous activities affecting those wetlands, we believe a coordinated effort by Federal, State, and private interests is essential if we are to successfully deal with the problem.

As I noted previously, President Bush has established a national goal of no-net-loss of wetlands and has set up an interagency task force under the Domestic Policy Council to formulate a strategy for achieving that goal. Therefore, consistent with Federal/State partnerships, we support the intent of S. 630, as stated in section 3, to provide for the development and implementation of a restoration program for the coastal wetlands of Louisiana, and to authorize the State of Louisiana to develop and implement a program to achieve a goal of no-net-loss of coastal wetlands affected by development activities.

The Administration has several concerns with specific provisions of S. 630, however. We are concerned about the statutory delegation to the State of Louisiana of the existing permit program established under section 404 of the Clean Water Act. As the Environmental Protection Agency and the Army Corps of Engineers point out in their statements, existing law allows for the development of a State Program General Permit under the current 404 program. This approach would allow Louisiana to control almost all activities governed by the 404 program while maintaining the benefits of Federal involvement in the 404 process. The Department, primarily through the Service, plays a vital role in that process that would be lost under the provisions of S. 630.

Currently, the Fish and Wildlife Coordination Act requires the Corps to consult with the Secretary of the Interior, through the Service, before issuing any permit under section 404 of the Clean Water Act or section 10 of the Rivers and Harbors Act of 1899. The purpose of this consultation is to obtain the findings of the Service regarding fish and wildlife resources likely to be affected by each proposed action, along with recommendations on the conservation of those resources.

The fish and wildlife resources of the Louisiana coastal arrea are of national and international significance. Therefore, replacing the current Federal regulatory program with a State-operated program should be accomplished in a manner that would not reduce the level of protection currently afforded to those resources.

In addition, we note that section 5 requires the development of a Coastal Wetlands Conservation and Restoration Plan. We are concerned that the Secretary of the Interior is given no role in the development of the Plan. The Department of the Interior, principally through the Service, is already involved in extensive wetland conservation activities throughout coastal Louisiana. We believe involvement of the Secretary of the Interior in any such planning is critical to assure that Congressional mandates governing management of fish and wildlife resources and Department-owned lands are adequately addressed.

Likewise, section 9 provides for approval of the Coastal Wetlands Conservation and Restoration Plan and subsequent modifications thereto by the Secretary of the Army and the Administrator of the

Environmental Protection Agency. Because of the active involvement and interest of the Department in wetland conservation activities in coastal Louisiana and the U.S. Fish and Wildlife Service's responsibilities for operating several National Wildlife Refuges in that area, we are concerned that the Secretary of the Interior is not included as one of the parties who must approve that Plan and, together with the Environmental Protection Agency and the Army Corps of Engineers, maintain an oversight role during the Plan's implementation.

The central feature of S. 630 is contained in section 12, which would establish a Coastal Wetlands Conservation and Restoration Trust Fund for use in coastal Louisiana. Each year the Trust Fund would receive revenues equivalent to 5 percent of all bonuses, rents, and royalties paid to the United States associated with leasing activities on the Outer Continental Shelf during the preceding fiscal year. Monies in this fund would be made available to the Secretary of the Army to implement the Plan's provisions. Upon the approval of the Plan, the State of Louisiana would be eligible for grants which would be cost-shared on a 90 percent Federal, 10 percent State basis.

New spending authorized under this provision is estimated to approximate $100 - 150 million annually, thereby increasing the Federal budgetary deficit by that amount. The Administration is opposed to the creation of a new permanent indefinite account outside of the annual appropriations process. While there may be appropriate projects to be undertaken, such projects should compete for funding with other worthwhile projects and

activities. We simply cannot afford to exempt them from the weighing of priorities which can only be achieved by subjecting all such spending to the budgetary and appropriations processes.

A report prepared for the Minerals Management Service by the Center of Wetland Studies at Louisiana State University has indicated that OCS development has accounted for 8 - 17 percent of all wetlands loss in Louisiana when both direct and indirect impacts are considered. Other significant causes of wetland loss have been identified and include natural factors such as erosion, subsidence and sea level rise as well as dredging, flood control, land use and agricultural practices. Based on the many factors involved in wetland loss, we oppose establishment of a wetlands trust fund funded entirely by earmarking a percentage of OCS revenues for an indefinite period of time.

In addition, we point out that a percentage of all OCS revenues, regardless of their origin, would be deposited to the Fund. Finally, we note that revenues from offshore activities in State waters are not part of the funding formula. Louisiana realizes significant revenues from activities in the three miles of State water granted under the Submerged Lands Act. In addition, section 8(g) of the Outer Continental Shelf Lands Act was amended to provide Louisiana with 27 percent of all revenue derived from the first three miles of the OCS. Those amendments specifically state that the 8(g) payment is intended, among other things, to provide coastal States with funds for the mitigation of adverse environmental effects related to the development of the OCS. We

believe it is unfair to other States with wetlands problems to use yet more OCS revenues to finance this program.

Section 13 would authorize the Secretary of the Army to provide grants to the State to implement the provisions of the Coastal Wetlands Conservation and Restoration Plan. As noted previously, section 5 does provide for input by Federal agencies during the development of that plan. However, once again, the bill contains no provisions for consultation with the Department during the advanced engineering and design phase of individual wetland conservation and restoration projects that would be constructed with grants from the trust fund. We are concerned, therefore, if the trust fund were to be authorized, that the Department of the Interior would have no role in the implementation of these projects.

Furthermore, similar to the programs administered under Pittman-Robertson/Dingell-Johnson (which are matching grants), we believe the State ought to be required to submit any such projects to the Federal agencies for approval prior to receiving any such grants and it be on a project-by-project basis. We recognize that the major portion of the funding would be devoted to large-scale restoration activities and that involvement of the Department of the Interior, in particular the Fish and Wildlife Service and the U.S. Geological Survey, is especially critical.

Our experience in water resources project planning has shown that the U.S. Fish and Wildlife Service has often provided recommendations during the advanced engineering and design phase

that resulted in substantially greater benefits to fish and wildlife resources and/or reduced adverse effects on those resources. The Department's input during that phase also helps ensure that adverse impacts on national wildlife refuges located near such projects are avoided, minimized or compensated. Because numerous wetland conservation activities and projects would be identified by the State, several years may elapse before certain features are implemented. In that case, the Department's involvement during the advanced engineering and design stages of such projects would be especially beneficial since the need for changes in initial designs usually increases with changing environmental conditions.

Mr. Chairman, we agree that the goals of this bill are extremely important. However, we oppose enactment for the reasons stated above. This concludes my prepared statement. I will be happy to answer any questions you may have.

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STATEMENT OF
REBECCA W. HANMER
ACTING ASSISTANT ADMINISTRATOR FOR WATER
U.S. ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE
SUBCOMMITTEE ON ENVIRONMENTAL PROTECTION
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
U.S. SENATE

August 2, 1989

Good morning Mr. Chairman, members of the Subcommittee and ladies and gentlemen. I am Rebecca W. Hanmer, Acting Assistant Administrator for Water of the Environmental Protection Agency.

I am very pleased to address the Subcommittee on the important issue of wetlands protection. I am particularly glad to be able to address the important issue of protecting the rapidly diminishing wetland resources in the State of Louisiana and what the Federal Government's role should be in protecting and restoring those vital national resources.

As I am sure the subcommittee -- and particularly Senator Breaux -- is aware, the loss of coastal Louisiana wetlands is not only staggering and very disturbing locally, but is having adverse impacts which are of national significance, including impacts on the Gulf fisheries and the bird populations of the Central Flyway. The State's problems of wetlands loss far exceed those of any other area in the United States, and thus truly merit a special focus by the people of Louisiana. Furthermore,

we share the State's view that there are positive steps which can be taken to address this loss.

The Subcommittee is also undoubtedly aware of the recently established Domestic Policy Council Inter-agency Working Group on Wetlands. This Working Group -- which clearly establishes wetlands protection as one of the President's top environmental goals -- met for the first time on July 5, 1989. Among other things, the Working Group will recommend ways to revise and strengthen the existing executive orders on wetlands protection and floodplain management, including a goal of no net loss of wetlands. One of the key tasks will be to define and explain the no net loss goal to provide for consistent direction in Federal applications of the goal, and guidance to those States and other governments or organizations that elect to adopt the goal in their own laws or programs. It will also provide overall guidance for the Administration on the issue of wetlands protection. The President's commitment and leadership will greatly strengthen the Federal protection of wetlands and the consistency of that protection.

The Administration clearly recognizes the urgent need for protection and restoration of Louisiana's dwindling coastal wetlands and the importance of those wetlands to the United States as well as Louisiana. While we support the intent of S.

630, we must oppose enactment of the Bill, for the reasons stated below.

First, the Bill requires that a substantial amount of wetlands restoration planning be accomplished by the State. The proposed studies are appropriate and worthy; however, much of the proposed work is already underway through the Louisiana Comprehensive Coastal Wetlands Study. The Corps of Engineers is leading this strong and positive study and the State and EPA among others are active participants. We recommend that the State take advantage of the progress and institutional strength of this existing Study and provide additional resources to it, rather than initiating another study to determine the wetland protection needs in Louisiana.

Second, the proposed State regulatory program severely limits the Federal role. Although we strongly advocate enhancing the States' role in protecting wetlands throughout the country, we believe that a continuing Federal role is vital to ensure that consistent standards are met and to provide the regulated public with a consistent regulatory framework from State to State. In addition, the Federal regulatory program under Section 404 of the Clean Water Act will be moving toward a goal of no net loss, which is the basic goal of S. 630.

We believe that the goal of the Bill -- to allow the State to achieve no net loss of wetlands from regulated development activities in Louisiana -- can be met with an alternative approach. The basic structure provided in the Bill is a comprehensive State program, which includes permits for activities that affect wetlands. Upon approval of the permit program by the EPA and Army, the existing Section 404 program would no longer be in effect in coastal Louisiana. There exists a mechanism under the Section 404 program that allows for a State Program General Permit (SPGP) by the Corps of Engineers. This approach, already under existing law, allows the State to more fully control its wetland losses, but would maintain the benefits of Federal involvement and consistent criteria for State Section 404 programs. Moreover, the approach would allow the State to regulate and otherwise address development in a manner more comprehensive than that provided for under the Federal program. That is, as the State develops State laws and regulations, it could regulate a greater range of activities than just the discharge of dredged or fill material as provided for under the Federal Section 404 program.

A State Program General Permit could be based on the type of strong State wetlands protection provisions that the Bill outlines under Sections 6, 7, and 8, which include the goal of no net loss and the requirement for standards of review that are at least as stringent as those required by the Section 404(b)(1)

Guidelines. Such an SPGP, granted under existing law, would allow virtually all activities to be fully controlled by the State, while not creating a patchwork where the Section 404 program applies in some areas and not in others. A general permit of this type based on a State program in North Carolina has been very successful with only a handful of projects requiring separate State and Federal review. The State of North Carolina controls what occurs in its coastal waters but often utilizes the expertise and backing of the Federal agencies through the SPGP process to make the best decisions possible. The State has often found the support and backing of the Federal government vital in ensuring the protection that they deem appropriate.

We do not believe that a State-by-State approach of totally supplanting the Section 404 program is wise and would like to avoid such a precedent in Louisiana.

EPA has been actively involved in the Corps of Engineers' "Louisiana Comprehensive Coastal Wetlands Study". The study will contribute significantly to the problem and achieve a Federal objective to develop and implement a comprehensive strategy for managing and protecting the resources of Louisiana's coastal areas.

EPA has a number of additional activities underway to contribute to the information and actions needed in coastal Louisiana including:

- Cumulative impact study of wetland losses in the Pearl River Basin to the coast - EPA's first major application of our evolving cumulative impact assessment methodology.

- Progress towards designation of Barataria Bay Basin as a National Estuary Project - the project was identified as a priority in the 1988 Ocean Dumping Ban Act and we expect the Governor to submit a nomination in the near future.

- Handbook for wetland managers to evaluate aquatic impacts of oil and gas activities, used to develop EPA positions on proposed projects.

- Aerial photography and photo-interpretation of coastal Louisiana -Region VI developed maps of coastal Louisiana wetlands. The photographs and maps are used in developing EPA positions on proposed activities.

- Freshwater marsh management study site in the Atchafalaya Basin, where EPA and the State are studying wetland loss at a managed wetland site.

- Contributions to the Plant Materials laboratory to develop methods for establishment and dispersal of marsh vegetation in eroding waters.

- Near Coastal Waters Pilot Project contributing funding and technical assistance to State wetlands restoration demonstration projects, involving terracing techniques and sediment diversion structures.

Several of these activities will provide information for use in the next phase of the Louisiana Comprehensive Coastal Wetlands Study. We intend to work with the Corps in order to move ahead with the Comprehensive study. We realize these actions are only the beginning, but we believe, as you do, that Louisiana's coastal heritage needs of help.

In summary, EPA is committed to working with the State, with the Corps and with you to effect a strong protection program for Louisiana's wetlands.

I appreciate the opportunity to provide EPA's views on the proposed legislation and will be happy to answer any questions that you may have.

Questions from Senator Warner
for Rebecca Hanmer
Acting Assistant Administrator for Water
U.S. Environmental Protection Agency

Question 1: Please provide specific statutory authority for the Bush Administration's decision to pursue a policy of "no net loss" of wetlands.

Answer: The President has Constitutional authority to set executive policy unless it conflicts with statute. In addition, the National Environmental Policy Act (NEPA) (42 USC 4332) in Section 102 "authorizes and directs that, to the fullest extent possible (1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this Act..." Policies included in NEPA are:

> "to promote efforts which will prevent or eliminate damage to the environment and biosphere," and
>
> "to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic and other requirements of present and future generations of Americans."

Another relevant statutorily authority is the Clean Water Act (33 USC 466 et seq.), the objective of which is to "restore and maintain the chemical, physical and biological integrity of the nation's waters" (Section 101). The Clean Water Act establishes "the national goal that the discharge of pollutants in the navigable waters be eliminated by 1985."

President Bush has established a principle of commitment to the preservation of the Nation's remaining wetlands, working with the States to slow and eventually stop the loss. At the President's direction, an interagency task force under the Domestic Policy Council has been established to revise and strengthen the current Presidential Executive order on wetlands protection. This will include establishment of no net loss as a national goal and clear direction to Federal Agencies to work toward this goal to the extent feasible under current law. Achievement of the goal of no net loss of wetlands requires strengthening existing Federal programs and regulations that protect, maintain and restore wetlands.

Question 2: In its review of the Ware Creek Water Reservoir permit, what consideration did EPA give to the fact that, if the land in question is not used for a reservoir it will be developed instead, probably resulting in an even greater loss of wetlands ?

Answer: EPA did consider the potential for development of the watershed during its review of the Ware Creek Water Reservoir permit. EPA's conclusions and findings with respect to this issue may be found in Section V of the Final Determination entitled "Mitigation". EPA's review of the administrative record as well as coordination with representatives of James City County indicated that the Ware Creek watershed would be developed with or without the proposed reservoir. However, EPA does not believe that the administrative record supports the conclusion that in the absence of the proposed reservoir and the County's Reservoir Protection Overlay District (RPOD), development would occur in a more environmentally damaging fashion or result in a greater loss of wetlands.

The record is inconclusive with respect to the type of development (residential development, timbering activities, etc.) that would occur in the watershed with or without the proposed reservoir and does not support the conclusion that there will be less habitat or that the habitat will be of lower quality without the County's RPOD. EPA notes that, if the reservoir is not built, the terrain of the watershed may serve to somewhat constrain the extent of development as well as its encroachment on the aquatic resources of the watershed. EPA also notes that the existing wetlands continue to be subject to regulation under Section 404, which applies to almost all of the activities we understand to be planned for this area.

Question 3: In vetoing the Ware Creek project, what cost-effective alternatives did EPA consider to be available to James City County to meet future water supply needs ?

Answer: In the Final Section 404(c) Determination EPA found that the practicable alternatives available to James City County included increased conservation to decrease demand, use of conventional and/or unconventional treatment of groundwater and the three dam alternative, used alone or in combination. In addition, EPA determined that participation in the least environmentally damaging regional solution, if a regional solution could be developed, would likely be the most desireable alternative.

Generally, the information in the administrative record regarding alternatives was mainly concerned with the potential of each of the aforementioned alternatives to either provide the entire anticipated Ware Creek yield (as opposed to a component of same) or to affect future water supply plans for the entire Lower James River/York River Peninsula, as opposed to a comparison of costs. Both the Corps of Engineers and James City County, in

their respective studies, concluded that utilizing desalinization to meet the anticipated Ware Creek yield would be too expensive. However, the costs associated with utilizing desalinization as a component of a water supply plan were not addressed. A comparison of construction costs (not including mitigation costs) contained within the Corps EIS on the Ware Creek proposal suggests that the three dam alternative would be somewhat less cost effective; although construction costs for this alternative would be less, it would also provide less water. Nevertheless, the record did not support the conclusion that the alternatives mentioned above were not cost-effective (even if not the most cost-effective), and EPA believes that it did support the conclusion that these alternatives are practicable.

STATEMENT OF VIRGINIA VAN SICKLE
BEFORE THE SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON ENVIRONMENTAL PROTECTIONS

AUGUST 2, 1989

Mr. Chairman and members of the Subcommittee, my name is Virginia Van Sickle and I am Secretary of the Louisiana Department of Wildlife and Fisheries. I appreciate the opportunity to appear before you today in support of a very important piece of legislation that will assist in the conservation, protection and restoration of 41% of this country's coastal wetlands.

It was not too many decades ago that the general public perceived wetlands as wasteland-- and that is how we treated them. In more recent years, there has been an increasing recognition of the value of wetlands. Organizations such as Ducks Unlimited, the United States Fish and Wildlife Service and state fish and game agencies have worked together to protect interior wetlands which have been continually disappearing as a result of agricultural development. Other than from a regulatory standpoint (i.e. reacting to permits), however, little attention has been given to the loss of coastal wetlands. While hundreds of millions of dollars have been dedicated to the preservation of interior wetlands, the federal government has virtually ignored the tremendous loss of coastal wetlands, which occurs largely in the state of Louisiana.

Eighty percent of the wetland loss in the United States occurs in Louisiana each year. Roughly one half of Louisiana's coastal wetlands have been lost. This loss is caused by a combination of natural processes (such as sea level rise and subsidence of abandoned delta lobes) and man's interference. The United States Army Corps of Engineers has leveed and channeled the Mississippi River from Cairo, Illinois, to the the Gulf of Mexico, preventing natural overbank flooding and sediment deposition required to maintain our coastal marsh. Thousands of miles of oil field canals have directly destroyed our wetlands in support of energy development. Over eightly percent of United States Outercontinental Shelf production has occurred off our coast and has come onshore through hundreds of pipeline canals and navigation channels. The impact of providing flood control and waterborne commerce for 2/3 of the United States and for the development of onshore and OCS oil and gas has left our coast in a scarred and deteriorated condition.

The good news is that we still have 3 million acres of coastal marsh and swamps left in Louisiana. This 3 million acres comprises 41% of this nation's coastal wetlands. Further demise of this sediment-starved ecosystem has serious implications for fish and wildlife in much of the United States, not just Louisiana.

Consider waterfowl for example. Large-scale losses of marsh habitat in the coastal zone are occurring concurrently with declining numbers of waterfowl wintering in our region. Although much of the decrease in waterfowl is attributed to the loss of

interior wetlands, waterfowl experts believe that habitat changes in the Gulf Coast will adversely affect the number of waterfowl surviving through the winter and their subsequent reproductive success. There is good reason for concern.

The number of ducks (mallards, pintails, canvasbacks, teals, and other major species) wintering in coastal Louisiana has declined from an average of 4.6 million in the early 1970's to less than 2.8 million...a loss of almost one half of our migratory waterfowl.

Louisiana marshes still support more waterfowl than any other state, including 1/4 of North America's entire duck population and over 2/3 of the duck population for the productive Mississippi Flyway. Our wetlands support 500,000 geese each winter, 1.5 million American coots and hundreds of thousands of non-game, MIGRATORY birds, many of which are endangered or threatened.

Louisiana wetlands also support this country's largest population of fur-bearing animals. We rank first in United States fur production and first in North America. Populations of otter, mink, muskrat, and nutria reach unusually large proportions if they are not trapped. Fur prices have fallen in recent years and the animals are "eating out" the marsh, creating a very unique but serious threat to fresh and brackish marsh environments.

Finally, I want to give you some perspective on the relationship of United States fisheries production to Louisiana wetlands. Our coastal ecosystem is made up of forested wetlands, marsh, barrier islands, and open water. Between the marsh interface and the barrier islands lies the most productive estuary in the country. The productivity of this system is largely due to primary (photosynthetic) production of our marshes.

Louisiana leads the nation in the production of seafood, with an average of 30% of United States landings annually. We are top producer of shrimp, menhaden, oysters, and crabs. Our shrimp fishery is valued at an average of $200,000,000 per year dockside. Last year we produced a record 53,600,000 pounds of crabs (1/4 of United States crab production).

Fishery production in the Gulf of Mexico is heavily dependent upon the estuary/marsh complex of south Louisiana. These fishery nursery grounds support fishery harvests from Texas to Florida.

The National Marine Fisheries Service has just published several papers which present the alarming theory that once the marsh fraction of our coastal ecosystem begins to be outweighed by open water, productivity will begin to decline. NMFS asserts that the continual conversion of marsh to open water will have a peak or optimum effect on fisheries and then decline dramatically. Scientists at Louisiana State University and NMFS predict a "collapse" of our fisheries within 30 years if the trend in marsh loss is not reversed.

We can restore wetlands. Over 500,000 acres of Louisiana coastal marsh are actively managed by our Department of Wildlife and Fisheries and the United States Fish and Wildlife and

Wildlife Service. We have virtually eliminated wetland loss in managed areas such as Rockefeller Refuge and Marsh Island.

We can slow the unique rate of wetland loss which is occurring in Louisiana. The net loss of wetlands due to development activities can be eliminated with the assistance of EPA and the Corps of Engineers. We recognize the importance of strict regulatory controls.

Our waterways, oil, and natural gas have been important to the nation; our wetlands, too, are a national concern. Thus far we have done an excellent job at monitoring the demise of an ecosystem. This summer, the Louisiana legislature created a Trust Fund that will cover the state's share of any project that could be envisioned under S.630. Dave Soileau, Governor Roemer's Coordinator of coastal restoration, will tell you more about this unprecedented state commitment.

STATEMENT OF MR. DAVID M. SOILEAU, TECHNICAL COORDINATOR FOR COASTAL ACTIVITIES, OFFICE OF THE GOVERNOR, BATON ROUGE LOUISIANA, BEFORE THE SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS, SUBCOMMITTEE ON ENVIRONMENTAL PROTECTION

August 2, 1989

Mr. Chairman, members of the Subcommittee, my name is David Soileau. I serve as Governor Buddy Roemer's Technical Coordinator for Coastal Activities. I appreciate the opportunity to appear before you today.

Earlier this year, we provided testimony before the House and Senate Committees on Appropriations, Subcommittees on Energy and Water Development; the House Committee on Public Works and Transportation, Subcommittee on Water Resources; and the Senate Committee on Energy and Natural Resources. I have attached copies of that previous testimony for this subcommittee's record.

Our previous testimony provided considerable detail regarding the magnitude of the coastal wetland loss problem in Louisiana. It noted the national importance of these wetlands to sport and commercially important fish and wildlife, and the values of wetlands as a buffer to storm surges and as a natural filter to waterborne pollutants. We also identified a number of opportunities, available under existing Congressional authorities, by which federal agencies like the Corps of Engineers and the Soil Conservation Service could begin to reduce rates of vegetated wetland loss in Louisiana. Unfortunately, internal policy constraints and insufficient funding are usually cited by those agencies as the reasons for failing to move expeditiously to implement significant wetland enhancement and restoration programs and projects.

For the most part, state and federal technicians know how to approach the problem. In fact, nearly a year ago, under a charge from Governor Roemer, cabinet-level individuals from State government agencies prepared a report identifying a number of measures to enhance and restore vegetated wetlands in coastal Louisiana. Although some of the recommendations in that report will require further study and evaluation, many could be implemented now, if adequate funding were available.

Louisiana intends to do its share. Not only do we now have a report identifying measures that can be implemented almost immediately but, about two weeks ago, the Louisiana Legislature approved a bill, subsequently signed by Governor Roemer, creating an Executive Assistant to the Governor to deal with coastal

activities and establishing a Wetlands Conservation and Restoration Fund. Monies in this Fund could accrue at the rate of $25 million a year, depending on the level of mineral revenues to the State. Our next effort will be to seek constitutional protection of that Fund via a referendum of the voters of Louisiana on October 7th of this year.

It is important, however, for you, as National Leaders, to understand that we did not get into this predicament without help. Dredging and leveeing of rivers in upper parts of the Mississippi River Valley for navigation and flood control purposes forced increased runoff into Louisiana. This, of course, required the construction of levees and floodways in this State to alleviate flooding caused by the increased runoff. The long term impact of such activities was to cut off the annual overflow of sediment-rich waters into our coastal marshes, leading to their deterioration. This deterioration has been accelerated by the intrusion of salt water through canals dug to accommodate transmission pipelines and by development of the onshore infrastructure needed to support the exploration and production of oil and gas reserves on the Outer Continental Shelf of Louisiana.

To combat such long term impacts, we need nothing short of the kind of program and funding that would be provided for in Senate Bill 630. If enacted, that bill would provide from $140 to $150 million a year to be used to conserve, protect, and restore coastal wetlands in the State of Louisiana. Frankly, this level of funding is critical in view of the magnitude of the effort that will be needed to bring the wetland loss problems in coastal Louisiana under control. Passage of this bill would also be an important step forward in helping to attain the goal of no net loss of wetlands as it relates to loss trends that have been set into motion by nearly a half century of Federally sponsored navigation and flood control projects in Louisiana.

Thank you.

STATEMENT OF MR. DAVID M. SOILEAU, TECHNICAL COORDINATOR FOR COASTAL ACTIVITIES, OFFICE OF THE GOVERNOR, BATON ROUGE, LOUISIANA, BEFORE THE SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES REGARDING SENATE AMENDMENT NUMBER 229 TO SENATE BILL 406

JULY 24, 1989

Mr. Chairman, members of the Subcommittee, my name is David Soileau. I serve as Governor Buddy Roemer's Technical Coordinator for Coastal Activities. I appreciate the opportunity to appear before you today to address an issue of critical importance to our State and it's citizens--that is, the fate of our coastal wetlands.

Louisiana contains almost 40 percent of the coastal wetlands in the continental United States. These wetlands support more than a quarter of the entire nation's fishery production and about 40 percent of the continental U.S. fur production. Louisiana wetlands also serve as vital resting and over-wintering areas for migratory waterfowl, providing necessary habitat for 70 percent of the waterfowl of the Mississippi flyway alone. Frankly, we believe that the fish and wildlife resources of Louisiana's coastal wetlands and their economic value are national in scope.

Nevertheless, it is within Louisiana's coastal wetlands that 80 percent of the national loss is occurring. Current rates of coastal wetland loss in Louisiana range from 40 to 50 square miles per year, or in the neighborhood of 30,000 acres a year--that's equivalent to a loss of 1 acre every 15 to 20 minutes.

The causes of Louisiana's wetlands loss are numerous but, undoubtedly, man's activities are among the most significant. Dredging and leveeing of rivers in upper parts of the Mississippi River Valley for navigation and flood control purposes forced increased runoff into Louisiana. This, of course, required the construction of levees and floodways in this State to alleviate flooding caused by the increased runoff. The long-term impact of such activities was to cut off the annual overflow of sediment-rich waters into our coastal marshes, leading to their deterioration. This deterioration has been accelerated by the construction of on-shore exploration canals and production facilities, canals dug to accommodate transmission pipelines, and the on-shore infrastructure associated with the exploration and production of oil and gas reserves on the Outer Continental Shelf of Louisiana.

According to a study funded by the Minerals Management Service (published in January 1988), OCS oil and gas related activities account for at least 8 to 18 percent of the total coastal wetland loss in Louisiana, and non-OCS oil and gas activities account for at least 22 to 42 percent of the total wetland loss. When combined these figures indicate that the impact of oil and gas exploration, production, and transmission in and through Louisiana's coastal

wetlands causes from 30 percent to as much as 60 percent of the 30,000-acre annual loss of those wetlands.

To combat such long-term impacts, we need nothing short of the kind of program and funding that would be provided for in Amendment 229 to Senate Bill 406, which is the subject of this hearing. If enacted, that bill would provide the significant levels of Federal funding that will be needed to conserve, protect, and restore coastal wetlands in the State of Louisiana. Frankly, this level of funding is critical in view of the magnitude of the effort needed to bring the wetland loss problems in coastal Louisiana under control.

While on the subject of the bill, we request, in view of the new coastal initiatives spawned under the administration of Governor Roemer, that the bill sponsors seriously consider including a significant role for the State in selecting and planning the wetlands restoration and enhancement projects to be implemented in Louisiana by the Federal interagency group.

Nearly a year ago, under a charge from Governor Roemer, cabinet-level individuals from State government agencies prepared a report identifying a number of measures to enhance and restore vegetated wetlands in coastal Louisiana. Although some of the recommendations in that report will require further study and evaluation, many could be implemented now, if adequate funding were available.

In closing, let me say that Louisiana intends to do it's share. Not only do we now have a report identifying measures that can be implemented almost immediately but, less than two weeks ago, the Louisiana Legislature approved a bill, subsequently signed by Governor Roemer, creating an Executive Assistant to the Governor to deal with coastal activities and establishing a Wetlands Conservation and Restoration Fund. Monies in this Fund could accrue at the rate of $25 million a year, depending on the level of mineral revenues to the State. Our next effort will be to seek constitutional protection of that Fund via a referendum of the voters of Louisiana on October 7th of this year.

In view of these considerations, we hope you will agree that large-scale Federal intervention is not only warranted but should be mandated. In our view, Amendment 229 to Senate Bill 406 is an ideal vehicle to accomplish just that.

THANK YOU

STATEMENT OF MR. DAVID M. SOILEAU, TECHNICAL COORDINATOR FOR COASTAL ACTIVITIES, OFFICE OF THE GOVERNOR, BATON ROUGE, LOUISIANA, BEFORE THE HOUSE COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION, SUBCOMMITTEE ON WATER RESOURCES

MAY 12, 1989

Mr. Chairman, members of the Subcommittee, my name is David Soileau. I serve as Governor Buddy Roemer's Technical Coordinator for Coastal Activities. I appreciate the opportunity to appear before you today. My comments will focus on initiatives taken by Governor Roemer to ensure that the various departments of State government speak with one voice relative to issues that affect the wetlands of coastal Louisiana. I will also identify some State and Federal initiatives involving policy, legislative, and structural actions that, if advanced expeditiously, would have a significant impact on (1) reducing the rate of loss of vegetated wetlands in coastal Louisiana and (2) planning for and implementing significant restoration measures to reestablish vegetated wetlands in areas that have been converted to open water.

About a year ago, shortly after taking office, Governor Roemer established a Coastal Restoration Policy Committee composed of various cabinet-level individuals from a number of departments of State government that had interests or responsibilities in the areas of natural resources and coastal wetlands. He charged that group with developing a plan to identify measures to preserve, enhance, create, and restore vegetated wetlands in coastal Louisiana. A report addressing policy, legislative, and structural measures that could be taken to accomplish these goals was completed and unanimously adopted by the Policy Committee in August 1988. Subsequently, Governor Roemer appointed a Technical Coordinator to oversee the implementation of report-recommendations and to function essentially as a clearinghouse for the activities of other State agencies and departments that could impact coastal wetlands.

The report prepared by the Policy Committee identifies a number of recommendations which, if funds and authorities allow, could be implemented immediately or in the short term to reduce the rate of wetland loss in coastal Louisiana. The report also provides a number of long-term recommendations dealing with measures to restore or create vegetated wetlands in areas where they have been lost. The latter group of recommendations (e.g., major diversions of water and sediment from the Atchafalaya and Mississippi Rivers into coastal wetlands) are likely to have far-reaching impacts: socially, economically, and politically. Nevertheless, they must be addressed. Any real success in conserving and reclaiming even a portion of Louisiana's vegetated wetlands can only be accomplished through the implementation of such measures.

We anticipate that many of the smaller-scale, short-term structural recommendations would more appropriately be implemented by State and local governments and private entities, leaving the larger-scale structures to be further evaluated and implemented with Federal funding. With that in mind, Governor Roemer included a provision, in the constitutional amendment brought before Louisiana voters on April 29, 1989, calling for establishment of a Wetlands Preservation Fund. That amendment would have provided, for the first time in Louisiana, annually recurring revenues dedicated to coastal restoration. Although the fiscal-reform, constitutional amendment failed, our hope of providing for such a dedicated fund has not diminished. There are, in fact, a number of bills currently being considered by the Louisiana Legislature that would establish such a trust fund. We are optimistic that this issue will receive favorable consideration.

We applaud President Bush's new national goal of "no net loss of wetlands." We disagree, however, with Assistant Secretary of the Army Robert Page's observation (in testimony to the House Appropriations Subcommittee on January 31, 1989) that "...no net loss is by nation, not by specific projects." To believe that is tantamount to acknowledging that wetland losses from individual, Federally-sponsored or permitted projects have never been nor can they ever be mitigated. The record, in Louisiana, clearly shows that when a genuine effort was made by the Corps to mitigate adverse wetland impacts from a water resource development project or to require appropriate mitigation from the recipient of a Federal permit on a case-by-case basis, that mitigation generally proved to be effective and successful. There is no reason to assume that this could not continue to be the rule rather than the exception. In Louisiana there is ample opportunity within our vast reaches of deteriorating coastal wetlands to provide adequate area to mitigate future water development projects. We believe that a no net loss of wetlands goal from development via mitigation is attainable.

There are, in fact, current proposals in the State Legislature that would move Louisiana into the forefront Nationally with respect to achieving no net loss of wetlands from future development activities permitted in our coastal wetlands. In short, legislation currently being considered would provide for a prohibition against non-water-dependent developments in coastal wetlands and for mitigation of those water-dependent activities that would be permitted. We encourage similar National legislation. To truly achieve the intended goal of no net loss of wetlands, however, would require significant levels of Federal funding to construct massive projects intent on restoring the thousands of acres of coastal Louisiana wetlands that have been lost as a result, primarily, of Federally sponsored and permitted activities over the past 50 years.

Louisiana intends to do its share. But, it is important for you, as National leaders, to understand that we did not get into this predicament without help. Dredging and leveeing of rivers in upper parts of the Mississippi River Valley, to provide for navigation and flood control, forced increased runoff into Louisiana. This, of course, required the

construction of levees and floodways in this State to alleviate flooding caused by the increased runoff. The long term impact of such activities was to cut off sediment rich waters from our coastal marshes, leading to their accelerated deterioration and, in the absence of significant intervention, eventually to their total demise.

To combat such long term impacts, we need nothing short of the kind of program and funding that would be provided via the legislation being sponsored by Senators Breaux, Johnston, Mitchell, and others; namely Senate Bill 630. If enacted, that bill would provide from $140 to $150 million a year to be used to conserve, protect, and restore coastal wetlands in the State of Louisiana. Passage of this bill would be an important step forward in helping to attain the goal of no net loss of wetlands as it relates to loss trends that have been set into motion by nearly a half century of Federally sponsored navigation and flood control projects in Louisiana.

Also from a Federal perspective, I refer you to two rather obvious opportunities to address coastal restoration via ongoing programs within the U.S. Department of Agriculture. Currently, the Watershed Protection and Flood Prevention Act (Public Law 83-566) authorizes the Secretary of Agriculture to cooperate with states, local agencies, and landowners in planning and implementing improvements for soil conservation. That law provides both for technical and financial assistance. Where it is being applied, planning and cost-sharing assistance to landowners is being provided for a number and variety of approved structural improvements. It appears that projects designed and implemented to protect coastal wetlands from erosion would fit well within the authority and framework of this program. However, I understand that, at present, it is the policy of the Soil Conservation Service that Public Law 566 funds be used to cost-share with landowners on only upland soil conservation projects, not on coastal soil conservation projects. With that in mind, we request that this Committee do whatever it can to bring about a positive change in this policy relative to Louisiana coastal marshlands.

A second program, administered by ASCS, currently provides cost-sharing for landowners to install erosion control measures in areas being used to commercially produce certain agricultural crops such as grains, vegetables, livestock, and other agricultural commodities. Our coastal marsh areas do not qualify for participation in this program because owners of coastal wetlands are not considered commercial agricultural producers. Hereto, we recommend that this Committee request that the Secretary of Agriculture expand the scope and definition of "agricultural producers" for purposes of extending eligibility within this program to landowners and operators who manage coastal wetlands for the production of furbearers, alligators, and the like.

I have included as an attachment to my current testimony, an April 4, 1989, statement provided by Governor Roemer to the House and Senate Committees on Appropriations, Subcommittees on Energy and Water Development. That statement identified a number of specific recommendations for appropriations to address immediate coastal restoration needs in Louisiana.

We encourage you to endorse these recommendations in meetings with your Congressional colleagues.

In summary, I would like to reiterate that the loss of vegetated wetlands in Louisiana has reached catastrophic levels. It is a problem that Louisiana is taking very seriously and plans to address both legislatively and financially to the maximum extent possible. We believe, however, that the fish and wildlife resources and economic values of coastal Louisiana are National in scope. Louisiana marshes serve as the principal nursery for the fishery resources of the entire the Gulf of Mexico. They likewise provide necessary winter habitat for 70 percent of the waterfowl of the Mississippi Flyway. We also believe that a large percentage of the ongoing wetland loss trend in the Louisiana coastal area has been brought about by a half century of Federal planning and construction of single-purpose flood control and navigation projects. Those considerations, we hope, will lead you, as they have us, to conclude that large-scale Federal intervention is not only warranted but should be mandated.

We believe that a major step forward in the process of elevating this issue to a National level has been taken by Congressman Hayes in inviting this group to Louisiana. Mr. Chairman, we are very grateful for the opportunity to present testimony to your Commttee.

I think Louisiana is especially fortunate, also, to have an entire Congressional Delegation that is sensitive and responsive to the need to secure critical Federal policy changes, legislation, and dollars to battle coastal wetland deterioration in this State. We trust that all of you will work harmoniously toward those goals.

Thank you

STATEMENT OF GOVERNOR BUDDY ROEMER, STATE OF LOUISIANA, BEFORE THE SENATE COMMITTEE ON APPROPRIATIONS, SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT AND HOUSE COMMITTEE ON APPROPRIATIONS, SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT, APRIL 4, 1989

Mr. Chairman, members of the Subcommittee thank you for the opportunity to present the State of Louisiana's public works appropriation recommendations for FY 1990. My statement focuses on these parts: discussions on coastal wetland deterioration, flood control and navigation concerns, and specific amendments proposed to the administration's budget allowance.

Coastal Wetlands Deterioration

Coastal wetland loss in Louisiana exceeds 30,000 acres per year. In May 1988 I established a Coastal Restoration Policy Committee consisting of cabinet-level officials charged with developing a set of prioritized recommendations to preserve, enhance and restore vegetated wetlands in coastal Louisiana. The Policy Committee presented me with their report in August 1988.

That report identifies a number of recommendations which, if funds and authorities allow, could be implemented immediately or in the short term to slow the rate of wetland loss in coastal Louisiana. The report also provides a number of long-term recommendations dealing with measures to restore or create vegetated wetlands in areas where they have been lost. Those recommendations (e.g., major diversions of water and sediment from the Atchafalaya and Mississippi Rivers into coastal marshlands) are likely to have far-reaching impacts: socially, economically, and politically. Nevertheless, they must be addressed; any real success in conserving and reclaiming even a portion of Louisiana's wetlands can only be accomplished through the implementation of such measures.

We in the State are coordinating closely with the Corps of Engineers and other Federal agencies in an attempt to initiate the final phase of a Louisiana Comprehensive Coastal Wetlands Study; we endorse your funding the Federal share of the costs of that study. The primary purpose of the study is to evaluate the currently proposed long-term recommendations of my Policy Committee and any other plans which the Corps of Engineers and the State of Louisiana mutually agree have reasonable merit in the battle against wetland deterioration.

The study output would not be traditional in the sense that a benefit/cost ratio above parity would be required to recommend Federal funding. Sufficient legislative authority exists under Section 907 of PL 99-662 to allow Federal funding for projects that offer real opportunity to benefit fish, wildlife and their habitats, without requiring that monetary benefits exceed costs. The study would list alternative recommendations intended to enhance and restore coastal wetlands in Louisiana. Prioritization of recommendations would be based on anticipated success in accomplishing the goals of wetland enhancement and restoration, and to some degree on

ATTACHMENT

comparative costs, while not allowing the traditional benefit/cost analysis to be the driving force in selecting among a number of viable alternatives.

Section 906(f) of PL 99-662 authorizes that the first costs of enhancement measures carried out for the Mississippi Delta Region, Louisiana Project, (specifically the Caernarvon and Davis Pond Freshwater Diversion Projects) shall be 100 percent Federal. Nevertheless, the State was forced to agree to provide 25 percent of the costs of the Caernarvon Structure in order to get construction initiated. We expect at least a 25 percent state cost-share request for construction of the Davis Pond Structure.

Section 3(a)(8) of PL 100-676 authorized construction of the Bonnet Carre' Freshwater Diversion Structure, as a companion to the two previously mentioned. The authorizing legislation was mute in regards to cost-sharing, although the fish and wildlife resources to be enhanced by this project must also be considered National (pursuant to Section 906(e) of PL 99-662). The Bonnet Carre' Diversion would directly benefit the resources of both Louisiana and Mississippi. The maintenance of the Gulf of Mexico fishery depends heavily on Louisiana's wetlands. The waterfowl population of the Mississippi Flyway cannot be sustained without maintenance of the wetlands to be benefitted by this project. This, of course, would justify the first costs of construction to be 100 percent Federal.

The dwindling renewable coastal resources of Louisiana are of National significance. Congress has indicated at least the intention that two of the freshwater diversion projects (Caernarvon and Davis Pond) be constructed entirely at Federal cost. Considering the National significance of the benefits to accrue from the Bonnet Carre' Structure, we hope that you share our view that Federal funds adequate to construct all three structures should be appropriated.

Those three freshwater diversion projects are to be the first water resources development measures undertaken by the New Orleans District Corps of Engineers in the name of fish, wildlife and wetland enhancement. The Corps' traditional mission, that essentially limits its focus to navigation and flood control matters, has contributed substantially to the deterioration of the vast coastal marshes of Louisiana. We strongly encourage expansion of the current mission of the Corps to include (on a co-equal status with flood control and navigation) protection, enhancement and creation of vegetated wetlands. Specifically, Section 1155 (PL 99-662) should be extended for another 10 years at a $10 million per year appropriation level. Its implementation should be considered to be among the highest of priorities.

We applaud President Bush's new national goal of "No net loss of wetlands." We disagree with Assistant Secretary of the Army Robert Page's observation (in testimony to the House Appropriations Subcommittee on January 31, 1989) that "... no net loss is by nation, not by specific projects." To believe that is tantamount to acknowledging that wetland losses from individual, Federally-sponsored or permitted projects have never been nor can they ever be mitigated. The record, in Louisiana, clearly shows that when a genuine effort was made by the Corps to mitigate adverse wetland impacts from a water resource development project or to require appropriate mitigation

from the recipient of a Federal permit on a case-by-case basis, that mitigation generally proved to be effective and successful. There is no reason to assume that this could not continue to be the rule rather than the exception. In Louisiana there is ample opportunity within our vast reaches of deteriorating coastal wetlands to provide adequate area to mitigate future water development projects. We believe that a no net loss of wetlands goal from development via mitigation is attainable.

It is not surprising that so few Section 404 permits for non-water dependent activities in wetlands are ever denied by the Corps of Engineers, when Mr. Page himself (in testimony to the House Appropriations Subcommittee on January 31, 1989) finds "... the concept of non-water dependency so unclean." Probably the most widely accepted definition of non-water dependency is found in EPA's 404 (b)(1) Guidelines, promulgated pursuant to the Clean Water Act. By definition, a non-water dependent activity is one that does not require access or proximity to or siting within a wetland to fulfill its basic purpose. Even to the most liberal regulator, it should appear reasonable to assume that condominiums, hotels, motels, golf courses, airports and shopping centers, to name a few, do not, to fulfill their basic purpose, need to be sited within a wetland. The Louisiana Legislature in its upcoming regular session will be considering a legislative proposal to prohibit non-water dependent developments in wetlands and to require full mitigation of water-dependent developments that are allowed in its wetlands. We would encourage similar National legislation.

Regarding the Avoca Island Levee Extension, it is important to remember the limits of the benefits to accrue from the levee and to carefully weigh these limited benefits against the levee's estimated cost. Backwater flooding is only one of the causes of flooding being experienced in the area east of the Atchafalaya Basin Floodway. Flooding caused by headwater runoff, tidal influence, hurricanes and rapid subsidence will continue to plague this area even after the $120 million (plus) levee extension is installed. My staff is, at this time, working with local government officials in the impact area to develop alternatives to the Corps' proposed Avoca Island Levee Extension. An alternative barrier levee plan now under development may prove feasible, and at a cost near that proposed to be spent for the levee extension. A well-planned barrier levee would provide flood relief from other forms of flooding and would result in fewer environmental damages. We urge you to hold your support for any Corps proposal to extend the Avoca Island Levee until alternative options can be fully explored.

We in the State have identified a number of measures that, if implemented quickly, could have an immediate positive impact on the wetland loss problem. Some of these measures are a primary responsibility of the State, in cooperation with local governments and private individuals. Many of those recommendations involve modifying the operation or maintenance procedures of recently authorized or on-going Corps of Engineers projects in Louisiana and, accordingly, must be implemented through that agency.

Flood Control and Navigation

Since 1879 local expenditures for flood control in Louisiana have exceeded $730 million. This amount adjusted to 1979 dollars represents expenditures in excess of $5.3 billion. Nearly one-half of the potential flooded area of the Lower Mississippi River Valley lies in Louisiana. This record not only meets, but exceeds any National Water Policy local participation requirement ever put into practice.

The State of Louisiana has historically supported and provided the non-federal cooperation needs in assisting and developing navigation improvements in Louisiana for National benefit. Louisiana has three of the top deep water ports and 18 shallow draft port facilities in the country. We intend to continue to provide the country with the benefits to access to foreign markets.

The Office of Management and Budget has proposed a 50% reduction and a 50/50 cost share for both the Floodplain Management Services Program (Section 206 of the 1960 Flood Control Act) and Planning Assistance to States Program (Section 22 of the 1974 Water Resources Development Act). The FY 90 request of $10.5 million for Section 206 and $5 million for Section 22 represents a 5% and a 9% increase over FY 89 appropriations respectively. These two programs are not grant programs in as much as they provide extensive flood loss reduction services and information to state and local governments. These services include such things as specific base flood hazard data and mapping, hurricane evacuation studies (including New Orleans and 9 surrounding parishes), coastal land loss and erosion control data, and basic planning assistance in flood control and water supply and waste water treatment. Since these two programs are not grant programs, it is recommended that the 50/50 cost share be eliminated and that the requested funding for FY 90 be restored.

We generally endorse the Administration's FY 90 budget request for water resource projects in Louisiana with the exception of the following specific amendments:

Louisiana Shoreline Erosion Inventory

(Budget: 0) (Request: $50,000)
One of the recommendations that have been made to reduce or stabilize coastal barrier islands and headlands involves nourishment of these areas with offshore bottom sediments. It is critical then that inventories of available bottom sediments in these areas be developed. We recommend that this inventory be initiated in this fiscal year.

Mississippi and Louisiana Estuarine Areas

(Budget: 0) (Request: $1,000,000)
It is our understanding that preparation of final plans and specifications are nearing completion. We note, however, that the Administration has not requested funding to begin construction. In view of the significant enhancement value of this project to coastal wetlands and associated fish and wildlife resources, we urge that it be funded to start construction this fiscal year.

Mermentau, Vermilion and Calcasieu Rivers and Bayou Teche
(Grand and White Lakes Area)

(Budget: 0) (Request: $100,000)
We recommend the appropriation of funds necessary to allow the Corps to have the staff capability to operate the Catfish and Schooner Bayou Water Control Structures in southwest Louisiana on a 24-hour basis. It is widely recognized that water is currently being impounded to an excessive level, to the detriment of marsh, in the Grand and White Lakes area, partially as a result of the inability of the Corps to operate these structures on a round-the-clock basis and to take advantage of every opportunity to lower water levels. While waiting for the completion of a Corps study of management needs in the entire area, we believe that this measure would significantly enhance marshes now.

Algiers Lock

(Budget: 0) (Request: $25,000)
Operation of the Algiers Lock to allow freshwater to flow from the Mississippi River to the Barataria Basin would provide a reasonable, inexpensive opportunity to divert water into a basin that is currently suffering from saltwater intrusion problems. We, accordingly, encourage the appropriation of funds to allow the Corps to increase operation of the Algiers Lock to allow for freshwater diversion.

Maintenance Dredging for Marsh Creation

The New Orleans District annually dredges 60 million cubic yards of material in the maintenance of navigation channels. When considered by the Corps to be "economically feasible", some of this dredged material is used to create vegetated wetlands. If all of this material were deposited in shallow open water in coastal Louisiana over 6,000 acres of marsh could be created each year. On that basis, we recommend that additional funds be appropriated to the Corps to provide the "incentive" to maximize the use of dredged material to create marsh. As it is difficult to assess the precise amount of additional funding that would be required, we are recommending additional funding in the amount of 10 percent for each of the projects listed below. This is to be provided specifically to cover the additional costs that might be associated with spoil placement for marsh creation. If the Corps were to determine that actual cost requirements would exceed 10 percent, we would encourage an increase in allowance to the extent needed to accomplish the goal of maximizing marsh creation with dredged material.

Projects for which increased funding is requested for marsh creation with dredged material include the Atchafalaya River, Bayou Chene Boeuf and Black; Barataria Bay Waterway; Calcasieu River and Pass; Gulf Intracoastal Waterway; Houma Navigation Canal; Mermentau River; Mississippi River, Baton Rouge to the Gulf; Mississippi River Gulf Outlet; Mississippi River Outlets, Venice; Pearl River; and the Bayou Lafourche and Lafourche - Jump Waterway.

Atchafalaya Basin

(Budget: $32,800,000) (Request: $32,800,000)
The Sherburne freshwater control structure will provide the hydrologic capability to improve fishery and waterfowl habitat conditions on the State Sherburne Wildlife Management Area, Atchafalaya National Wildlife Refuge and Corps of Engineers recreation lands in the floodway. The structure will mitigate problems that have resulted from blockage of flow resulting from construction of the main river levees. Construction of the structure should be added to the administration proposal as a priority activity for FY 1990.

Atchafalaya Basin Floodway System

(Budget: $11,700,000) (Request: $11,700,000)
Acquisition of lands in fee title from willing sellers should continue as the first priority. Acquisition of the authorized environmental protection easements should proceed subsequent to but not before a Memorandum of Agreement between the state and Corps of Engineers, wherein the State agrees to assume management responsibility, is consummated. The easement rights to be purchased should include the right to provide control over the method of timber harvest as is specifically addressed in the Corps' report upon which authorization is based. Merely the regulation of clear cutting as addressed in the November 1988 Real Estate Design Memorandum is not adequate. The forested wetlands of the Atchafalaya Floodway require environmentally sensitive timber cutting regulations specific to the area.

Red River Waterway

(Budget: $97,000,000) (Request: $101,800,000)
A $2,500,000 appropriation for the acquisition of up to 5,000 acres of mitigation lands in the Stumpy Lake / Swan Lake / Loggy Bayou Wildlife Management Area vicinity is required. Construction of the waterway is proceeding. Our proposal is conservative in that it represents less than 40 percent of the authorized level of mitigation. Acquisition of lands in this specific amount would contribute significantly to state efforts to solve the Stumpy Lake / Lake Bistineau erosion problem, capitalize on the availability of low cost lands from willing sellers and allow the state to maximize wetland and waterfowl benefits from design and operation of its Stumpy Lake / Lake Bistineau erosion control project. In addition, we are requesting $2.3 million to begin construction on Locks and Dams 4 and 5 and to do work on the Vick extension, Saline Bend Dike and Blakewood, Pump Bayou and Grand Lake reinforcement dikes in Fiscal Year 1990.

The State of Louisiana wishes to commend the Appropriations Sub-Committees on Energy and Water Development and to express our appreciation for the foresight and understanding exhibited for water resources projects which are vital to National and our State interests. We solicit your further consideration of the recommendations presented herein.

Working for the Nature of Tomorrow.

NATIONAL WILDLIFE FEDERATION

1400 Sixteenth Street, N.W., Washington, D.C. 20036-2266 (202) 797-6800

Statement of
Edward R. Osann
Director, Water Resources Program
National Wildlife Federation

regarding S. 630

before the
Subcommittee on Environmental Protection
Committee on Environment & Public Works
United States Senate

August 2, 1989

Thank you, Mr. Chairman, for the opportunity to present the views of the National Wildlife Federation on S. 630. My name is Edward Osann, and I am the Director of the Federation's Water Resources Program. Accompanying me here today is Steve Moyer, who is the Legislative Representative for the Federation's Wildlife and Fisheries Program. With affiliates in 51 states and territories and over 5.8 million members and supporters, the Federation is the nation's largest conservation education organization. We have an ongoing interest in wetland protection and the management of water resources, including the nationally important resources of coastal Louisiana. That interest is expressed in the resolution adopted by the National Wildlife Federation in 1982 regarding the abatement of Louisiana coastal wetland losses. (See Attachment 1.)

The National Wildlife Federation strongly supports the purposes of S. 630. The bill would establish a Federal-state

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partnership to eliminate the net loss of wetlands from new development, and begin restoring wetlands damaged by past activities. Senator Breaux and other members of the Louisiana delegation are to be commended for recognizing the enormous dimensions to this critical problem and for assuming the leadership to develop workable countermeasures. Governor Roemer and the state legislature are also to be commended for committing substantial state financial resources toward this partnership. S. 630 is a good starting point for the Congress to begin developing a strategy for reducing the rate of wetland loss in coastal Louisiana.

Federal legislation is needed now. The rate of coastal wetland loss in Louisiana, constituting nearly one square mile per week, is truly alarming. Against this backdrop, prompt enactment of Federal legislation is very important. In light of competing demands for limited Federal resources, the case for a new Federal-state initiative to restore coastal wetlands in Louisiana must be compelling, and indeed it is.

- Federal water resource development projects have trained the flow of the Mississippi River, delivering the fresh water and sediment needed for marsh maintenance, salt water repulsion, and beach nourishment into the deep waters of the Gulf of Mexico;
- Federally permitted activities in the coastal area have drained and filled thousands of acres of wetlands and exposed vast additional acreage to the devastating forces of salinity intrusion through navigation and pipeline canals;

• Nationally important natural resources are being jeopardized with the loss of habitat that supports 30% of the country's annual commercial harvest of fish and shellfish, 40% of the country's annual wild harvest of fur and hides, and important wintering areas for the migratory birds of the Mississippi Flyway.

S. 630 can and should be improved before enactment. After reviewing the text of S. 630, the staff of the Federation have highlighted a number of areas where the bill can be clarified and strengthened. (See Attachment 2.) These generally include:

-- Tightening key definitions, to clarify the scope and content of the coastal restoration program;

-- Immediate improvements in existing Federal regulatory programs that operate in coastal Louisiana;

-- Strengthened Federal oversight of state planning and permitting;

-- Greater non-Federal financial contributions and other measures to reduce Federal costs and target financial resources more efficiently.

These improvements, Mr. Chairman, will help ensure that tax dollars are spent wisely, permits are issued judiciously, and environmental values are protected carefully as the urgent task of restoring Louisiana's coastal wetlands gets underway. Thank you for the opportunity to present these views, and I would be pleased to respond to any questions the committee may have.

ATTACHMENT 1

NATIONAL WILDLIFE FEDERATION

1412 Sixteenth Street, N.W., Washington, D.C. 20036 202—797-6800

Resolution No. 10

ABATING LOUISIANA COASTAL WETLAND LOSS

WHEREAS, the coastal wetlands of the state of Louisiana are a nationally important resource, they support 25 percent of the total U.S. commercial fisheries harvest, they provide wintering habitat for more than two-thirds of the migratory waterfowl in the Mississippi Flyway, and they support a commercial fur harvest worth more than $16 million per year; and

WHEREAS, due to a variety of causes, the coastal wetlands of Louisiana are disappearing at an alarming rate of over 45 square miles per year; and

WHEREAS, the combined influence of man-made levees on the Mississippi River which prevent the influx of fresh water, silt, and nutrients into the coastal wetland system, and the dredging of canals primarily for navigation and the development of oil and gas resources throughout the Louisiana coastal zone greatly accelerate saltwater intrusion and wetland deterioration; and

WHEREAS, diversion of freshwater from the Mississippi River into the adjacent wetlands as proposed by the U.S. Army Corps of Engineers and the state of Louisiana would cause the growth of sub-deltas, combat saltwater intrusion and create conditions more favorable to the growth of fresh and intermediate marshes; and

WHEREAS, non-structural stabilization of offshore islands will help maintain the salinity balance of nearshore estuaries without disrupting the natural littoral drift from one island to the next; and

WHEREAS, the the state of Louisiana has passed legislation and appropriated funds for a program to reduce the loss of coastal wetlands and control saltwater intrusion;

NOW, THEREFORE, BE IT RESOLVED that the National Wildlife Federation, in annual meeting assembled March 18-21, 1982, in Milwaukee, Wisconsin, strongly supports the diversion of freshwater from the Mississippi River to help maintain and nourish coastal marshes; and

BE IT FURTHER RESOLVED that NWF strongly supports non-structural alternatives for stabilizing offshore barrier islands to retard saltwater intrusion. Structural alternatives for island and wetland protection are acceptable where clearly demonstrated threats to wildlife and fish habitat exists; and

BE IT FURTHER RESOLVED that these land loss abatement measures be financed through equitable payments from those who have benefitted and will benefit from the physical alterations which precipitated the wetland loss problem. Specifically, the National Wildlife Federation supports the

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financing of freshwater diversions with navigation user fees on the Mississippi River, and with appropriate federal cost-sharing as an integral mitigation feature of the ongoing Mississippi River and Tributaries Project, and the financing of state wetlands loss abatement measures with state revenues derived from oil and gas production as well as other available state revenue sources.

ATTACHMENT 2

NATIONAL WILDLIFE FEDERATION
MEMORANDUM

August 2, 1989

From: Jan Goldman-Carter, Steve Moyer, Scott Feierabend, and Ed Osann

Re: Recommended Improvements to S. 630, the Louisiana Coastal Wetlands Bill

Planning for and implementation of an effective coastal Louisiana wetland restoration program through a joint federal-state partnership is a national priority of the Federation. Our detailed comments on S. 630 are provided herein. Of course, these are the issues of concern at this time; more areas for discussion may arise as debate on the bill progresses.

FINDINGS

1. Section 2(3) of the bill includes a finding that wetland development has benefited the public. This language, together with other findings in the section, suggests that only the increasing scarcity of wetlands argues for a change of policy, and implies that important development benefits may be denied in the future to protect wetlands. This suggestion undercuts the purpose of the bill, and ignores the fact that the public is benefited by the protection of wetlands from unnecessary destruction and the full mitigation of unavoidable wetland losses. Section 2(3) would be more useful and accurate (and more consistent with the policies the U.S. is advocating in international development assistance) if it noted that much of the past loss of wetlands was not necessary, and 2) the losses that have been incurred to date need to be mitigated.

DEFINITION OF COASTAL RESTORATION PROJECT

Several places in the bill discuss coastal projects, but no single, clear definition is used. These references all seem to be tied to coastal *wetland* restoration. We suggest that the bill use the term "coastal wetland restoration project" and that this term be specifically defined to include fresh water diversion, sediment diversion, and similar types of projects which harness the natural energies of the Mississippi River System. It should specifically exclude levees, seawalls, and similar structures used for creating impoundments. The bill should avoid any appearance, let alone reality, that it is a vehicle for Federal funding for traditional flood control, drainage, or impoundment projects.

For example, in Section 5(c)(3), studies or construction of existing authorized "projects for coastal restoration" are exempted from a non-Federal cost-share. In Section 5(c)(4), "any project developed to restore coastal wetlands" found to significantly contribute to wetlands restoration has an automatic favorable benefit/cost ratio. A definition of "coastal wetland restoration projects" which ties the projects directly to *wetlands protection* should help alleviate concerns that the bill will result in federal taxpayers subsidizing pet beach enhancement projects and other inappropriate activities.

Section 5(c)(5) mandates continued funding of "coastal restoration and conservation projects" ongoing at the time the Federal-State Agreement is signed, and that these projects shall be exempt from the Federal cost-share provisions. This language is quite broad and suggests that projects inconsistent with the State Plan could be grandfathered in *and with no non-Federal cost share.* Why are "conservation projects" added here? The bill should limit this section to projects meeting a "coastal wetland restoration project" definition. It should not authorize Federal funding, for example, for marsh impoundment or forced drainage projects underway when the Agreement is signed.

Finally, sections 6 and 7, which set out the requirements of the State Plan, require only that the Plan describe "projects to restore" coastal wetland areas in Louisiana needing restoration (Section 6(b)) and that the Plan sets a schedule for completion of "technically feasible restoration projects" in coastal areas (Section 7(6)). Section 13 on grants from the Trust Fund offers no further guidance on what projects will be funded.

We agree with concerns expressed that we not define projects so narrowly as to unnecessarily constrain the Federal and State agencies from funding valuable wetlands restoration projects. We also recognize the bill defines "restoration" and that, as a technical matter, a definition of "coastal wetland restoration project" may not add much. Nevertheless, we believe the bill should impose some meaningful constraints on the nature of these Federally-subsidized projects and thus such a definition should be included.

One possible definition is the following:

> Section 4(7) "coastal wetland restoration project" means a project to create, restore, or protect coastal wetlands through sediment and freshwater diversion, restoring and maintaining barrier islands through pumping of sand and planting vegetation, and other measures which the Secretary finds will significantly contribute to restoration of the physical, chemical, and biological integrity of Louisiana's coastal wetlands.

THE SECTION 5 AGREEMENT

1. The Language in Section 5(c)(1) Should be Revised.

This recommendation is simply a minor word change to clarify the direction to the Secretary to make grants of $5,000,000 in each of the fiscal years 1990, 1991, and 1992 to assist in development of the Plan. As currently used, the word "aggregate" is confusing.

2. Cost-Sharing For Wetland Restoration Projects Should Be Consistent.

Sections 5(c)(3) and 5(c)(5) exempt previously authorized coastal projects from non-Federal cost-sharing requirements. These projects should not be singled out for this exemption.

3. Coastal Projects Should Not Receive An Automatic Favorable Benefit/Cost Ratio.

Section 5(c)(4) seeks to overcome analytic difficulties in the economic evaluation of wetland restoration projects with a Congressional determination that economic benefits exceed costs, even where they may not. This approach is both undesirable and unnecessary. The problem flows from the action by the previous administration modifying the rules by which Federal water projects are planned and evaluated. These modifications precluded the Corps in nearly all cases from recommending anything other than a plan that maximizes National Economic Development (NED) benefits, and eliminated Environmental Quality benefits as a basis for project approval where NED benefits are lacking.

Without seeking to explicitly reverse these policies across the board in this Act, we believe that a more accurate and responsible approach to section 5(c)(4) would be as follows: -

> The net ecological, aesthetic, and cultural benefits, together with the economic benefits, shall be deemed to exceed the costs of any coastal wetland restoration project (as defined elsewhere) within the State which the Secretary finds to significantly contribute to wetlands restoration.

ELEMENTS OF THE PLAN: PROJECT COST-EFFECTIVENESS

Prioritizing coastal wetland restoration projects eligible for funding from the Trust based on their cost-effectiveness in restoring and conserving coastal wetlands should be considered. This is particularly true if the bill retains the Section 5(c)(4) automatic favorable cost/benefit ratio. Cost-effectiveness is a priority ranking concept. It allows the Federal agencies in authorizing project funding to take into account comparative

factors such as the relative number of acres and quality of wetlands that a diversion project would create and the costs of achieving that result. The Trust Fund establishes the limits on the amount of Federal funding available. Cost-effectiveness is the tool for using those limited funds on a priority basis.

A logical place for such a provision is Section 7(6), which describes the coastal restoration projects element of the Plan. This section might be amended as follows:

> (6) a program that identifies coastal areas that should receive priority for technically feasible coastal wetland restoration projects, that identifies those technically feasible coastal wetland restoration projects in order of priority, based on their cost-effectiveness in restoring and conserving coastal wetlands, taking into account the quality of wetlands created, restored, or protected, and with due allowance for small scale projects necessary to demonstrate the use of new techniques or materials for coastal wetland restoration....

With this substantive guidance, the Secretary and Administrator have at least some oversight role over which projects get funded through their Section 9(b)(2) Plan approval authority. Without it, they have little say in the matter.

TIMING OF THE PLAN: INTERIM WETLAND PROTECTION

The bill is premised upon a strong national interest in and responsibility for stemming the loss of coastal wetlands in Louisiana. A cooperative approach is envisioned with the State assuming new planning and permitting responsibilities and the Federal government contributing technical expertise and major funding assistance. Specifically, ---

- the Governor must serve notice of his willingness to enter into an agreement (no time limit);
- Army and EPA must enter into an agreement with the State "promptly";
- the State must develop a Plan within 3 years of signing the agreement, unless "extended by the parties";
- Army and EPA must approve the Plan within 180 days;
- If the Plan is deficient in some respect, the State must remedy the deficiency within 180 days, and Army and EPA must approve the modified Plan within 90 days.

Under the best of circumstances, the essential provisions of the bill could take 4 to 5 years to go into effect. During this time, over 150,000 acres of coastal wetlands will have been lost, and scores of Federal permits will have been issued or renewed for development activities in the coastal area. In addition, there is the possibility that no agreement may be reached at all.

The bill would be greatly strengthened, and be more directly responsive to the special Federal interest and responsibility for coastal Louisiana, if it contained specific criteria for the issuance of any new or renewed Federal permits in the coastal area. We know enough now about the shortcomings of the operation of the existing Federal permit systems to be able to mandate some improvements -- improvements that may provide the only significant on-the-ground relief for the next 4 to 5 years. At the very minimum, such criteria are necessary to assure that Federal permits issued after the date of enactment of the bill do not add to the problems that must be redressed by this new and costly Federal-State program, but rather these permits can be the beginning of the solution. We suggest at least three simple criteria:

- a strong presumption that proposed new wetland losses, both direct and indirect, can and must be avoided;

- full compensation for all unavoidable wetland losses, direct or indirect;

- immediate delineation of the most obviously sensitive areas, such as Pontchartrain-Maurepas, Barataria Bay estuary, and Breton Sound estuary, as special management areas off limits to Federal permits for canal construction or expansion and the range of Federal grants, permits, and subsidies proscribed under the Coastal Barrier Resources Act.

THE STATE PERMIT PROGRAM

1. The Bill Must Clearly State that Coastal Wetland Restoration Projects Funded By the Trust May Not be Used As Mitigation to Offset Prospective Wetlands Losses.

While the intent and implication of the bill is that the coastal wetland restoration projects identified in Section 5(c) and in the Plan are to stabilize and reverse wetlands loss due to past development activities, rather than to offset current and future development activities in wetlands or coastal waters, this guidance is not expressly stated. One logical place for such an express limitation would be to add a new paragraph (b) to Section 8 and to change the existing paragraph (b) to (c).

This paragraph should, at a minimum, state that:

Under no circumstances will wetland acres or functions deemed to be conserved, restored, or created through the implementation of coastal wetland restoration projects identified in Section 7(6) and funded through grants pursuant to Section 13 be counted as wetlands gains for purposes of meeting the No Net Loss goal of the State Plan or be considered as mitigation for construction of any Federal flood control and navigation projects after the date of enactment.

2. S. 630 Should Not Delegate the §404 Permit Program to the State.

We have questions about the State permit program, recognizing that it amounts to a delegation of the CWA §404 permit program in those coastal wetlands and waters covered by the State's program. We recognize that the bill expands the State permit program to cover a broad range of "development activities" in order to achieve the No Net Loss goal. We strongly support this feature of the bill. However, we do not believe that delegation of the §404 program is a necessary prerequisite to a comprehensive State permit program for coastal wetlands.

Based on further review of the bill, we do not believe delegation of the §404 program upon adoption of the State Plan is in the best interest of the wetland resource and we therefore oppose this provision. First, this delegation eliminates many of the substantive safeguards of the §404 delegation process. Section 404(g) and (h) provide criteria which EPA is mandated to use in reviewing State delegation requests. The bill sets up a substitute approval process, eliminating this authority and duty. The bill removes much of the oversight authority that EPA has under §404 and, most significantly, appears to eliminate EPA's §404(c) authority. The elimination of EPA's §404(c) authority, in and of itself, is unacceptable. It is also likely to exclude many of the Fish and Wildlife Coordination Act and Endangered Species Act safeguards which exist under the Federal program.

Our recommendation would be to omit sections of the bill that have the effect of superseding the Federal §404 program, and allow the comprehensive State permit program described in the bill to coexist with the Federal §404 program. As a practical matter, the State and the Corps can coordinate their respective permit programs through joint notice and processing procedures to minimize delay and unnecessary duplication.

In addition, S. 630 would fund preparation of the State Plan, which would facilitate delegation of the §404 program through the §404 delegation process, should the State wish to assume the program. (As a practical matter, the general lack of planning

funds has been a major obstacle to program delegation in most states, and S. 630 appears to help overcome that obstacle in Louisiana.) With this approach, the Federal §404 program would continue to provide an important "safety net" for wetlands as the State program gets established, and the §404 delegation process would continue to be the route to State delegation.

While we are generally opposed to State delegation of the 404 program outside of the prescribed §404 delegation process, we are less troubled by the concept of partial State delegation. Since Louisiana has no present program for wetlands outside the coastal zone, it could not qualify for delegation under §404(g) as presently written. Furthermore, a substantial part of Louisiana's coastal zone is a traditional navigable water, and §404 prohibits delegation as to those waters. The National Wetlands Policy Forum Report recommends amendments that would allow for limited delegation (subject to the EPA review, approval, and oversight authorities now in the statutes). However, we question the wisdom of amending §404 in this respect in a bill dealing with one state's coastal wetlands.

3. The State Coastal Wetlands Permit Program, Program Approval, and Program Compliance Sections Should Be Modified.

Some of the specific deficiencies we see in the permit program sections of the bill, particularly if the State delegation provisions are not omitted, are as follows:

In Section 8(1)(G), consultation with the National Marine Fisheries Service (NMFS) is omitted. One way to resolve this is simply to require consultation in compliance with the ESA, and not specifically refer to either NMFS or the U.S. Fish and Wildlife Service. There is a concern that turning the §404 program over to the State will eliminate requirements for consultation under the Fish and Wildlife Coordination Act (among other Federal environmental laws). At a minimum, the bill should require the State to coordinate with Federal and State fish and wildlife agencies on a permit-by-permit basis in order to ensure compliance with the §404(b)(1) Guidelines.

Section 8(2) should require the State to provide *the Administrator* notice and copies of each permit application in order to assure that EPA will have the opportunity to submit timely written comments as provided in Section 8(3).

Section 8(4) should expressly provide for citizen suits to enforce the State permit program comparable to the CWA §505 provision for the Federal §404 program. Based on EPA's current state program regulations, it seems unlikely that EPA will insist on such a provision without an express statutory requirement.

EPA should also be primarily responsible for approval and oversight of the permit program element of the Plan. This approach would parallel EPA's current authority to approve and oversee State §404 programs as provided in CWA §404(g)-(l). To accomplish this change, Section 9(a) could be modified by adding a sentence as follows:

> The Administrator shall approve or disapprove the permit program element of the Plan in consultation with the Secretary and the Secretary of Interior acting through the Director of the U.S. Fish and Wildlife Service, in accordance with the provision of this Section.

Note that CWA §404(g) and (h) currently require EPA consultation with the Corps and FWS on State program approval.

Finally, Section 11 should authorize EPA to revoke the State permit program element of the Plan for failure to comply with the Plan or the Act without the Secretary's concurrence. This is basically the same authority EPA currently has for State §404 programs under CWA §404(i).

4. The Geographical Scope of the Wetlands and Waters Subject to the Permit Program Is Not Clear.

The geographical scope of the permit program seems to be "wetlands and other waters in the coastal area" of the State. The bill requires identification of the "entire area in the State of Louisiana that contains coastal wetlands," but does not call for a precise delineation of the wetlands and coastal waters subject to the permit program. "Coastal wetlands" are not defined. How will they be defined absent a statutory definition of wetlands?

The geographical scope of the permit program is particularly crucial if Section 10 continues to make §404 inapplicable "to any wetlands or other waters of the coastal areas of the State" once the permit program becomes effective. What is to keep the State from defining the coastal areas of Louisiana relatively broadly, thus excluding the Federal §404 program within this coastal boundary, and then narrowly defining the wetlands covered by the program? There does not appear to be anything in the bill which prevents the State from defining wetlands to exclude, for example, wetlands with saturated soil conditions which are only temporarily or rarely flooded.

If the State does limit the wetlands and waters covered to some subset of the areas currently regulated under §404, is the Corps going to have to come in and "pick up the pieces" in such a case? If so, that would seem to be a virtually impossible regulatory scheme to administer. Does the third sentence in Section 10(b) cover this situation, or does it just address the situation where the permit program approval is revoked for some

period of time and §404 becomes applicable in the interim? This language needs clarification.

5. The Regulatory Scope of the Permit Program Also Seems Unclear.

Section 8(b) says that compliance with a permit issued under the Plan for development activities affecting coastal wetlands and waters meets all requirements of CWA §§301, 307, 309, and 505. This language suggests that, armed with a state wetlands permit, a permittee is exempt from other CWA pollutant discharge requirements, including but not limited to the §402 NPDES permit program. This language also appears to preclude EPA enforcement of the Clean Water Act under §309 and citizen suit enforcement under §505. In addition to our opposition to preempting §404, this preemption of other CWA sections seems overly broad. This language needs further clarification.

IMPLEMENTATION OF THE PLAN

1. Coastal Wetland Restoration Authorization Procedures Should Be Clarified.

The relationship between current procedures by which Corps projects are planned, authorized, and funded and the way coastal wetland restoration projects contained in the State Plan will be implemented is not clear. Can the Secretary of the Army disburse Trust Fund moneys to the State to implement projects that have not been authorized by Congress (but have been approved by Army and EPA in the approval of the State Plan)? It is not likely that large, multi-purpose projects, such as a new outlet for the Mississippi River, will be authorized in this bill. We think the spirit of the bill would be best captured by a provision clarifying that the Secretary may make grants from the Trust Fund for "single-purpose" coastal wetland restoration projects, with recreation, fish and wildlife, and incidental flood control benefits, but that multi-purpose projects with navigation or substantial flood control benefits must be separately authorized by law.

2. The Bill Should Establish a Joint Federal-State Partnership in Developing and Implementing the Coastal Wetlands Restoration Plan.

Another issue which is a matter of concern is the role of the Federal government in the coastal wetlands restoration plan. While the Federal government is paying 90% of the cost of implementing the plan, the State seems to control the design and implementation of the plan. The Federal role seems to be limited to approving the plan, providing technical assistance when asked, and funding the plan.

We believe the success of the plan will depend in large part on a strong Federal contribution both with respect to the regulatory program and the design and implementation of environmentally effective and responsible restoration projects. The plan should thus be the joint product of the Corps and EPA, in consultation with other Federal agencies, at the Federal level, and a strong State coastal restoration agency at the State level. Amendments to Section 5, in conjunction with amendments omitting the State delegation of the §404 permitting program, should accomplish this result.

THE FUND

1. An Overall Cost Ceiling Would Help Secure Enactment of the Bill.

As introduced, the bill contains no cost ceiling. A ceiling will undoubtedly be necessary to secure enactment of the bill. We recommend that a ceiling be placed in the bill, probably in section 13, and that the ceiling be limited to the realistic spending requirements of the program in its early years.

2. A Private Landowner Cost-Share Contribution Would Strengthen The Bill.

The great majority of coastal wetlands in Louisiana are privately owned. The cost-sharing provisions of the section 13(b), and subsequent action by the State in setting up a dedicated fund, suggest that the State will provide the 10% non-Federal share. A landowner contribution of an additional 10% would strengthen the bill in three ways. Increased non-Federal cost-sharing will contribute to favorable consideration and enactment of the bill. It will also make limited Federal dollars go further in protecting coastal wetlands. Finally, a landowner contribution should also serve as a safeguard against costly governmental plans that are ineffective at actually protecting the lands in question. Landowner contributions might be raised through a general property tax levy throughout the coastal area, a special assessment of landowners affected by individual projects, or some other mechanism.

3. In-kind Cost-Share Contributions Should Be Limited.

Section 13(b) should be modified to require that no more than half of any non-Federal share of project costs may be in-kind, rather than cash.

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ADDITIONAL CORPS AUTHORITY

Section 15 provides very general authority for the Corps to protect, restore, and create vegetated wetlands, with priority equal to navigation and flood control. This language could easily be subject to varying interpretations that would sharply limit its usefulness. One activity that the Corps should be authorized to undertake on an interim basis is a modification of operations at the Old River Control Structure to allow for an increase in the share of Mississippi River flows (and sediment) sent down the Atchafalaya River, currently limited to 30%. The bill should authorize the Corps, after careful study, to divert additional flows for land building and marsh nourishment when such diversions will not produce adverse conditions on the Mississippi River downstream.

STATEMENT OF ROBERT G. HAYES

FOR

COASTAL CONSERVATION ASSOCIATION

ON THE

LOUISIANA COASTAL WETLANDS CONSERVATION AND RESTORATION ACT

S. 630

Presented to

The Senate Committee on the Environment & Public Works

Subcommittee on Environmental Protection

August 2, 1989

Good morning Mr. Chairman. My name is Robert G. Hayes and I thank you for the opportunity to testify on behalf of the Coastal Conservation Association (CCA) on this important issue. CCA commends Senator Breaux for his foresight in introducing a bill to conserve the natural habitat of Louisiana. The fishery resources of the southeast are highly dependant on the natural habitat found in the Mississippi delta, and CCA as a national organization strongly supports its conservation.

CCA is a national conservation organization and is composed of the Gulf Coast Conservation Association, Florida Conservation Association and the Atlantic Coast Conservation Association. At the present time, it has over 60 chapters in nine states and approximately 45,000 members. The organization has chapters in every coastal state from Texas -- east, and north to Virginia. We are concerned about the protection and use of our marine renewable resources for the present and future use of the nation.

A significant number of the fish and other resources which are of concern to our members are linked to the coastal wetlands during all or part of their life cycles. The coastal resources of the State of Louisiana are highly dependant on wetlands. CCA is alarmed at the rapid disappearance of this crucial area. This loss will lead to a decrease of the functionality of coastal wetlands as the nursery and habitat for our marine resources.

If something is not done to correct the loss and degradation of these estuaries and habitat, we stand to lose both the commercial and recreational marine fisheries in the state. Such a loss would be significant to both the State and the nation.

Our members, who have attended or participated in federal and state fisheries management gatherings, have heard reports and presentations by government, academic and corporate scientists which value the annual production of marine fisheries resources from each acre of Louisiana coastal wetlands at $2,000 to $60,000. Multiplying only the lowest of these figures times the number of acres lost results in a loss over the past ten years of $3.52 billion.

Pursuit by the recreational fishermen in Louisiana of the two most notable species, the red drum or redfish and the spotted sea trout or speckled trout, has been conservatively estimated to be worth one billion dollars to Louisiana. The value to the national has not been stated but should be much higher.

You will hear from the commercial fishing interests that the value to Louisiana and the nation from the two most notable commercial species, shrimp and menhaden, is a higher figure.

The main factors that have led to the loss and degradation of Louisiana's marine estuary and habitat areas, navigation and oil and gas, have been of great benefit to the nation as a whole.

Two months ago, at the national board meeting of CCA, Louisiana Gulf Coast Conservation Association (GCCA) proposed that CCA favor and actively support Senate bill 630. GCCA also asked to modify the bill to support the concept of no net loss of the functionality of the coastal wetlands as estuary and habitat for marine fisheries. This proposal was unanimously adopted. Functionality, as we see it, is the ability of the ecosystem to support fish and wildlife. Such an holistic view of the habitat should be incorporated in the bill's planning process to ensure that the environment will continue to support healthy stocks of fish, such as redfish and speckled trout.

Members from all of our states favor the approach in this bill. All of our member coastal states recognize the importance of establishing that "no net loss of wetlands" means no net loss of the functionality of coastal wetlands as habitat and estuary for marine resources. It is this feature that elevates this legislation from one benefiting only Louisiana to the status of a national issue.

Many of our national board members have visited Louisiana and fished her estuarine waters. All are amazed at her beauty and magnitude, and horrified at the thought of what has been lost, and what will continue to be lost, unless something is done.

The magnitude of what must be done is so great that it must be a national thrust; the cause is universal. We, therefore, urge passage of this bill.

Mr. Chairman, you have the support of our organization and we will work with you to pass this bill.

Coalition to Restore Coastal Louisiana
5551 Corporate Blvd., Suite 3-E • Baton Rouge, LA 70808 • 504/926-0750

SENATE BILL 630
LOUISIANA COASTAL WETLANDS CONSERVATION AND RESTORATION ACT

Hearing by the
Subcommittee on Environmental Protection
Committee on Environment and Public Works
United States Senate

Washington,D.C.
August 2, 1989

Testimony of
G. Paul Kemp, Executive Director
Coalition to Restore Coastal Louisiana
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Baton Rouge, Louisiana 70808

Mr. Chairman, Senator Breaux, and distinguished members of the Committee, I am Dr. Paul Kemp, the Executive Director of the Coalition to Restore Coastal Louisiana, a non-profit citizens' coalition which has evolved since 1986 to include over 80 organizations with a total membership in Louisiana of more than 25,000 people. The Coalition's mission is to mobilize action at the local, state and federal levels, to protect and restore Louisiana's coastal wetlands, before it is too late.

As director of the Coalition, I work closely with the mainstream conservation organizations, both national and local, but I also respond to the input I receive from other Coalition members, including churches, chambers of commerce, civics groups, businesses, Native Americans, villages and trade unions all across South Louisiana. To Louisianians, clearly, restoration of the Mississippi delta is about more than saving wetlands, it is also about preserving a way of life, and livelihoods.

Prior to becoming director, I was a research scientist and a consultant to industry and government on fine-grained sediment, or mud, transport and deposition by waves and currents. My own research, and that of colleagues in The Netherlands, have led me to understand that the current waste of wetlands in Louisiana is both unnecessary and, to some degree, reversible.

The technical challenges are significant, but they are surmountable if this Nation, as a whole, declares that the Mississippi River delta, including its wetlands, its culture and its renewable resources are worth saving. Because it is a National treasure, the equal of the Everglades or the Grand Canyon, which is at stake. In simplest terms, Senator Breaux's Bill is just such a declaration. Passage of this bill will at once put flesh on the presently undefined skeleton of national wetlands policy by addressing in a substantive way that 40% of the Nation's coastal wetlands which is experiencing the most deterioration -- the 5,000 square miles of the Mississippi River delta.

Both the new National focus on coastal wetlands by the President and the introduction of Senator Breaux's bill last March struck a responsive chord in Louisiana. Last month, the Louisiana legislature passed new laws which commit the State, despite near-bankruptcy, to dedicate up to $25 million per year of mineral revenues for coastal restoration. Furthermore, it is significant that Louisiana's first statewide referendum on the environment, a constitutional amendment to appear on the ballot this October, is an initiative to ensure that funding for wetlands restoration is secure and well-spent. It's chances for passage are excellent. Louisiana is now ready to do its share.

In the remainder of my testimony, I would like to draw attention to three reasons why a wetlands bill like SB 630 which is focused strictly on the Mississippi River delta, which envisions a strong Federal-state partnership in the planning and implementation of solutions, and which derives the Federal share of funding from existing Outer Continental Shelf (OCS) mineral revenues should receive Congressional support. These are,

o first, that the Mississippi River delta is a unique wetland land mass, set apart from all other ecological systems in the Nation by its distinctive geology, habitat value, and economic productivity;

- second, that the land-loss problem in the Mississippi River delta is more intimately associated with projects and activities conducted for national purposes, namely navigation and low-cost oil and gas exploration and development, than is true for any other threatened wetland area; and

- finally, that the solutions to land-loss in the Mississippi River delta will be unique in the degree to which they will make use of the largest sediment carrying river in North America.

WHAT IS AT RISK

We now know that 50 square miles of the Nation's most productive wetlands turn into open water each year along Louisiana's coast. That is approximately four acres an hour. But it happens foot by foot, yard by yard, spread across a wetland area of approximately 5,000 square miles. Somehow, the incremental nature of the loss at any one location conceals the magnitude of the problem as a whole.

More important than the statistics on the acreage lost, however, is the fact that a much larger area of habitat is being modified and degraded than is actually being lost in any given year. Each of the 5,000 square miles of Louisiana's coastal wetlands is affected. Salt meadows once protected by barrier islands are now exposed to significant wave action. Fragile, floating freshwater marshes are affected for the first time by salt water. And yes, towns and cities which once were buffered from the hurricane waves of the Gulf of Mexico by the damping action of miles of marsh are now protected only by levees of questionable adequacy.

What do we stand to lose -- can we afford to lose? The resources of this unique coastal landscape, the largest active river delta in North America, are of unparalleled value.

According to the National Marine Fisheries Service, about 28% of the commercial fisheries volume landed in the United States is dependent upon the wetlands of the Mississippi River delta. When only those species of finfish and shellfish are considered which spend at least some part of their lives in coastal waters, the contribution of the Mississippi River delta to fisheries volume is proportionately larger, nearly 50%.

Fisheries production is only one measure of the contribution of the Mississippi River delta, which each of us savors as we eat shrimp, crab, oysters and many types of finfish in restaurants all across America, even here on the banks of the Chesapeake Bay. Similar

testimony to the immense biological productivity of this unique landscape can be derived from statistics on fur production, where Louisiana also leads the Nation, and on the numbers of migratory waterfowl, over 50% of the North American total, which use Louisiana's wetlands as the southern terminus of the Mississippi Flyway.

It is estimated that Louisiana's wetlands support a total economic activity associated with the combined recreational and commercial fisheries which is on the order of a billion dollars a year. Current National Marine Fisheries Service predictions are for a dramatic reduction in yield to begin within the 1990's if the deterioration of coastal wetland nursery grounds in Louisiana is not slowed. The same conclusions may reasonably be extrapolated to the other wildlifedependent on the wetlands. It is a common irony of nature that harvested populations tend not to disappear slowly, but more often suddenly, as some critical part of their life cycle is affected irreversibly by a reduction in numbers or by habitat destruction. It is this tragedy that we are here today to prevent.

THECAUSES

We are told by some that the natural process of subsidence, coupled with the new threat posed by greenhouse-related sea level rise, must inevitably spell the end for the wetlands of the Mississippi River delta. This argument ignores first, the unique natural ability of wetlands to adapt to sea level changes by growing upward if supplied with sufficient sediment, and, second, the rapidity with which the wetlands have responded negatively to human modifications of delta hydrology in this century. The unprecedented rate of land loss over the past 40 years is a clue that man's activities do make a difference, and, by the same token, that corrective measures might also have swift ameliorative effects.

What have we done to the delta? First, we have virtually isolated it from the River. The Mississippi and its daughter, the Atchafalaya, have been leveed virtually to their mouths for flood control and navigation purposes. While the 30% of flow which is permitted down the Atchafalaya is slowly building land in the shallows of Atchafalaya Bay, all of the sediment passing down the main stem is lost from the coastal system and shunted off the continental shelf to water depths in excess of a thousand feet. It is now as clear in Louisiana, as it is along the Nile, that annual infusions of sediment

and freshwater are required in delta systems, not only for the construction of land, but also for its maintenance. The Mississippi River delta has been subjected to sediment starvation for most of this century, and the patient is failing fast.

Secondly, we have constructed approximately 8,000 miles of canals through the wetlands of the delta primarily to facilitate low-cost oil and gas extraction. These canals come in a variety of sizes, ranging from major shipping and navigation arteries, to access canals dredged to accomodate drilling barges, to cuts made for pipelines, large and small. They, along with the accompanying spoil banks, were constructed without consideration of the natural flow of water through the wetland basins, and so have accelerated land-loss by breaching barrier islands and natural levee ridges, while at the same time isolating other areas from contact with the rest of the estuary.

Increasingly, new canals have been associated with the movement of the industry offshore into the OCS. The rich mineral resources of this frontier, which typically generates more than 60% of all the total offshore mineral revenues received by the U.S. Treasury, must traverse Louisiana's wetlands to reach consumers all over the country. Future development of the OCS offshore industry means that pressure to dredge new canals through the Mississippi delta will persist, while the old ones, now virtually abandoned by the industry, continue to enlarge uncontrollably and negatively affect the hydrology and ecology.

THESOLUTIONS

Louisiana and Louisianians have enjoyed numerous benefits from the largely Federal expenditures for flood control and navigation, and from private oil and gas extraction activities conducted in the National interest. It is becoming clear, however, that the incidental consequence of management of the Mississippi River delta for these purposes alone amounts to a **de facto** management for maximum wetland loss.

Right now, for example, the state is locked in a struggle with the New Orleans District of the Corps of Engineers which is symptomatic of the larger problem. The question is whether sediments dredged from coastal channels and passes should be used beneficially to restore nearby barrier islands or disposed of in deep waters offshore. The Corps argues that the incremental benefits which regulations allow it to assign to restoring coastal barriers and the wetlands they protect

are not sufficient to justify altering their plans to certainly waste this material offshore. We would argue -- and SB 630 would mandate -- that such rules be changed.

The Mississippi/Atchafalaya River system is today the fifth largest sediment carrying river in the world. Significant diversion of sediment and water from these Rivers during high water periods through a conduit network consisting of open channels and pipelines similar to those used for irrigation in the West could potentially do much to reverse the destruction of the Mississippi delta without compromising flood control and navigation missions. Even more would be possible if an alternative navigation outlet could be developed which would reduce the dependence of the Corps on focusing scour to keep the navigation channel open at the river mouth.

There are those who argue that there is not enough sediment available to do the job. It is true that the Mississippi carried twice as much sediment in the 1930's and 40's, when reliable estimates were first made, than it does today. But it must be remembered that these early high estimates of sediment load reflect the opening of the Midwest to agriculture and the development of the dust bowl phenomenon. Virtually all of the present delta land mass was built when the River carried a far lower load -- probably comparable to that of today -- prior to deforestation and the arrival of Europeans in the Mississippi drainage.

Proactive efforts to harness the River for coastal restoration must inevitably be the cornerstone of any long-term plan to preserve the Mississippi River delta. In this context only, will the myriad and well-motivated other localized efforts to enhance sedimentation, to restore damaged wetlands by backfilling canals and removing spoil banks and to stabilize coastal barriers stand a chance of success.

Furthermore, once a substantive National commitment has been made to the delta, then it will be reasonable to ask that Louisianians, in return, protect this investment through imposition of tighter regulatory controls on wetland development activities. This is, I believe, the spirit in which Senator Breaux has offered SB 630, and this sentiment enjoys wide support in Louisiana.

CONCLUSION

The past two decades have witnessed development of a two-faced federal approach to wetlands in Louisiana. At the same time that

direct or indirect Federal actions have hastened the loss of all land in the delta, the Federal government has asked individuals and local governments to limit severely uses of wetlands for anything but oil and gas development.

The achievement of a goal of no net loss of coastal wetlands in Louisiana challenges our scientific and technological capabilities as well as our political will and financial resources. The goal of no net loss due to development activities can, in contrast, be achieved quite rapidly if Louisianians believe that the delta has a future, and that they are not being abandoned by the rest of the Nation to face the advance of the sea alone.

Finally, we have limited our comments with respect to the details of Senate Bill 630 primarily because we find the overall approach so refreshing, pragmatic and appropriate. We believe, however, that certain provisions of the bill should be spelled out in more detail.

First, we support a very strong role indeed for the EPA in ensuring public input and in certifying that restoration efforts in Louisiana are environmentally sound and enjoy widespread public support outside of the State. For the same reasons, we would also like to see additional assurances in the bill that any Federal funds used in the coastal restoration effort will not be spent to offset future losses to development activities. We recognize that a need will arise for mitigation or action to fully compensate for wetland destruction due to development by private interests, and our concern is that these efforts be undertaken and funded separately by the benefited parties as an addition to any effort using federal funds.

I hope that I have answered some of the questions that you may have about why Congress should approve an Act specifically focused on the conservation and restoration of Louisiana's coastal wetlands, rather than on the broader problem of wetland loss in all coastal states. Frankly, we in the Coalition who have witnessed the rate of change so personally do not feel that we can afford to wait for the slow process of developing generally applicable legislation to unfold with all the attendant interaction of so many disparate and competing interests. For this reason, as well as the clear National interest in the Mississippi River delta, I urge that you favorably consider the Louisiana Coastal Wetlands Conservation and Restoration Act and, further, that you exert the necessary leadership to move it toward swift passage. Technologies developed in Louisiana will then be available for application in other coastal areas, when, as the scientists tell us with certainty, these locations are confronted in the future with a problem as severe as that facing Louisiana today. Thank you for your attention.

TESTIMONY

OF

H. LEIGHTON STEWARD
Louisiana Landowners' Association
and
Chairman, President and Chief Executive Officer
The Louisiana Land and Exploration Company
New Orleans, Louisiana

Before the

Subcommittee on Environmental Protection

Senate Committee on Environment & Public Works

Thank you, Mr. Chairman - members of the subcommittee. I am Leighton Steward, Chairman and CEO of The Louisiana Land and Exploration Company, or LL&E as we refer to it. With me is Bill Berry, Director of Environmental Affairs & Safety for the company. I appear before you today both as a representative of LL&E and the Louisiana Landowners' Association, Inc.

The Louisiana Landowners' Association represents private parties that together own over 1.6 million acres of land within Louisiana -- much of it wetlands. One member, my company, is the largest private owner of coastal wetlands in the United States, with title to over 600,000 acres of Louisiana marshland. We landowners are all vitally interested in the critical wetlands issue.

Further, we are proud of our land. As an example, since the early 1950's, LL&E has recognized wetlands loss as a serious problem and has engaged in a conservation program to protect our property. Measures taken and those we continue to take are detailed in a paper titled "One Company's Experiences with Wetlands Conservation" that is attached to my written statement.

We are all pleased that wetlands loss, which has reached critical proportions in Louisiana, is finally receiving the national attention it deserves. The Corps of Engineers currently estimates that up to 35 square miles of Louisiana marshlands are disappearing each year -- over 20,000 acres. The poster shows the dramatic impact of such a loss rate on our state's shoreline within the next 50 years.

Based on experiences and observations over the years, I would like to share with you some of the landowners' general perceptions on this serious matter and to offer specific comments on S. 630.

In October, 1988, the National Wetlands Policy Forum released a report containing recommendations for the protection, conservation and enhancement of all wetlands in the United States. The heart of the report is the interim goal: "No overall net loss of wetlands". Since then, the goal has been adopted extensively -- by President Bush, the Environmental Protection Agency, in proposed legislation, etc. It is an admirable goal. However, it is impossible to achieve in Louisiana.

The major cause of wetlands loss in Louisiana is a natural and ongoing geologic process of the building and destruction of marshes coupled with the

leveeing of the lower Mississippi River. These man-made levees channel all the river's sediment into the deep waters of the Gulf of Mexico -- where it is lost and builds no new land. In the past, this dirt load was discharged across the Mississippi River Delta to form new land. Because of these factors, "no net loss of wetlands" cannot be accomplished in Louisiana.

LL&E has prepared both a more detailed booklet and a 14-minute video on the loss of Louisiana wetlands. A copy of each is attached to my written testimony.

Specific comments on S. 630 are.

Senator Breaux is to be commended for his leadership in crafting this bill addressing such a critical issue of national importance.

Landowners endorse the preparation of a comprehensive wetlands conservation and restoration plan. Also, the funding included in the legislation, to both prepare and implement the plan, is essential to its success.

Further, we support the concept that a single agency be solely responsible for permitting wetlands activities. The present dual state/federal permitting scheme tends to discourage rather than encourage marshland conservation projects. The process is particularly frustrating, since on both levels different

commenting agencies with different agendas all insist that permits primarily reflect their concerns. Excessive time delays are one result. For example, LL&E has just waited over 14 months to receive permits to simply maintain erosion control structures. Further, it is not unusual for a final permit to contain conditions so different from the original application that the applicant cannot accept the permit -- since it will not allow him to achieve his intended goals.

The existing dual permitting process is even more frustrating in attempting to permit Marsh Management Plans, particularly in light of the negative connotation of the term "Marsh Management". Using my own company as an example once again -- LL&E has a number of these plans that have been prepared by the Soil Conservation Service and are ready to be permitted. Implementation would aid in conserving our deteriorating wetlands. However, under the existing political and regulatory climate, it would be virtually impossible to obtain permits. Therefore, we are not actively pursuing the matter and do not plan to do so until the situation is rectified -- as it would be with Senator Breaux's bill. Others have had similar experiences.

Before leaving the permitting situation, I would like to make one further

point. It would certainly be beneficial to the marshes if a mechanism could be developed now to initiate "one stop" permitting. We're probably looking at over four years from now under S. 630 -- while the wetlands continue to disappear.

We also support revising the Corps of Engineers' mission to give wetlands protection, restoration and creation equal priority with navigation and flood control.

Next, I would like to make general suggestions concerning changes and additions to the proposed legislation.

First, the legislation should specifically recognize that over 75 percent of Louisiana coastal wetlands are privately owned. Therefore, landowners should have a definite role in the development of the state plan. Not only is it the future of our land that is at stake, but we do have valuable input that should be considered.

In this same regard, tax and other financial incentives should be given to landowners to encourage them to conduct projects to conserve, protect and restore coastal marshlands. For example, I understand the Agricultural Stabilization and Conservation Service funds up to 75 percent of certain

farmland conservation projects. Comparable support levels for wetlands conservation seems appropriate, particularly since privately held wetlands serve public needs as nursery grounds and habitat for fish, shrimp and other marine life and sanctuaries for waterfowl, song birds, and fur-bearing and other animals.

Finally, and probably most important, I would like to address "no net loss". Within the context of S. 630, the goal is employed in a more realistic sense than as stated by the National Wetlands Policy Forum -- it applies only to "development activities". However, while technically achievable, even this is not acceptable. Certainly, development losses should be minimized. As prudent landowners, we support such a policy. However, there is no way to completely eliminate development losses without eliminating development. I do not believe that this is the legislative intent and I am confident that we can resolve these problems within the context of S. 630. We support a multiple-use policy which recognizes development rights and encourages continued development of all resources in coastal Louisiana, while assuring appropriate wetlands conservation.

Thank you for the opportunity to appear before this subcommittee

hearing today. Both the Louisiana Landowners' Association and LL&E are available to work with you on this important environmental matter. I would now be happy to address any questions.

ONE COMPANY'S EXPERIENCES WITH WETLANDS CONSERVATION

by

W. L. Berry and G. J. Voisin

Prepared for
Presentation at the
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ONE COMPANY'S EXPERIENCES WITH WETLANDS CONSERVATION

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The Louisiana Land and Exploration Company's (LL&E) experiences with "Wetlands Conservation" are discussed in this paper. The term "Wetlands Conservation" is used to describe these activities rather than the much maligned term "Marsh Management". Apparently, in the minds of many people "Marsh Management" has become synonymous with impoundment or employing some other perceived harmful management technique in the wetlands. Therefore, LL&E recommends that the use of the term "Marsh Management" be dropped and replaced with "Wetlands Conservation". The latter term is actually more descriptive of a landowner's goal in preserving his property.

LL&E has owned in fee simple since the 1920's some 600,000 acres of land in South Louisiana, mainly wetlands. Over thirty years ago, the company recognized the importance of the brackish and intermediate marshes. At that time it became apparent to LL&E that the uncontrolled tidal movement through the many small streams, ditches, gullies, ponds and lagoons within the marshes was causing increased erosion, salt water intrusion and subsequent land loss. Studies were begun to determine how erosion could be retarded, if not stopped. The problem was discussed with many individuals familiar with the marshes and estuarine areas such as trappers and fishermen, and various conservation groups and government agencies.

A wetlands preservation program evolved from these studies. In April of 1954, LL&E commenced construction of its first "water control structure". These structures are weirs built across small streams, ditches, etc. The primary purpose of water control structures (weirs) is to retard water flow, not the quantity of exchange, but the velocity, and to stabilize water levels in the marshes. The structures prevent total drainage of the marshes during excessively low tides, thereby effectively reducing erosion caused by fast runoff. Since the

structures are constructed below normal tide levels, the necessary flow and/or mixing of water (saline and fresh) is retained and the estuarine nature of the area preserved. In addition, water is maintained for water dependent species in the many shallow water ponds, lagoons and potholes, even during extremely low tides. Areas protected by water control structures have become important nursery grounds for fish, shrimp and other marine life, home for many fur bearing and other animals, wintering areas for waterfowl, and sanctuaries for a great variety of other birds.

Since 1954, the company has constructed over 400 water control structures on fee lands, totaling almost five miles in length. The design and location of all of these weirs was based on recommendations of the United States Department of Agriculture, Soil Conservation Service (SCS). However, the cost of the program has been borne entirely by LL&E. In addition to the multimillions of dollars in construction costs, over $1,000,000 is spent annually for maintenance of structures and related activities. The same or similar methods of wetlands conservation used by LL&E have been adopted by the Louisiana Department of Wildlife and Fisheries and by other landowners.

Also, Louisiana Land has always been conscious of the need for all users to take measures to preserve the state's wetlands. Accordingly, actions considered detrimental to the marshes are restricted in almost all contracts involving LL&E property. These include oil and gas leases, geophysical permits, canal and pipeline permits and other activities. Lessees have been required to construct on LL&E lands hundreds of additional water control structures, dams and bulkheads, and to take other actions to prevent undue erosion, drainage, flooding, or salt water intrusion. Pipelines must be buried. Where they cross canals, ditches, and ponds, the burial depth is a minimum of three feet below the bottom of the waterways. Such restrictions predate current regulatory requirements by many years.

The benefits of the LL&E program extend to fishermen, hunters, trappers, wildlife photographers, and others. Each year many thousands of recreational fishermen catch spotted weak fish, red drum and other fin fish at or in the near vicinity of the water control structures. Many more harvest shrimp with cast nets. LL&E has under lease over 1,400 sites for recreational hunting and fishing - camps where families and their friends spend weekends, vacations and other time off. Approximately 350 hunting leases (primarily waterfowl) provided facilities for more than 6,500 sportsmen during the 1987-88 hunting season.

Company employees regularly inspect the water control structures. However, sport fishermen and hunters frequently report damage to structures before it is detected during the company's routine inspections. This is an indication that sportsmen recognize the value of the structures and are willing to cooperate in maintaining them.

LL&E investigations in recent years have shown that the company's program has produced results beyond expectations. With improved conditions in the protected areas, they have become, in effect, nursery grounds for fish, shrimp and other marine life and sanctuaries for waterfowl, song birds and fur bearing and other animals. Early in the program, the Wildlife and Fisheries Commission of the State of Louisiana recognized its value. In an article published in the October, 1956 issue of the Louisiana Conservationist, it was stated:

> "For instance, the Louisiana Land and Exploration Company, one of the largest marsh and land holders in the state, has recently set out upon an extensive marsh maintenance program. The majority of this property lies within the marsh areas that are subject to rapid erosion, tide fluctuation and salt water intrusion. Actual land losses from erosion have been accurately measured and outlined on maps. Strategic points in tidal channels have been located for the placement of water control structures which are so designed as to stop erosion and adjust water levels and salinities in order to improve conditions for the three-cornered-grass growth. Suitable structures for both the prevention of erosion and proper control of tides have been experimented with and put into effect in a big way. Rules and regulations have been promulgated that are now made a part of the permits for any oil activity on the property. All canals and drilling sites must be incased within levees, if at all possible. Abandoned canals and dry-hole transportation canals must be dammed and maintained by their permittee. Areas that may be improved by canals and levees are studied and management devices made a part of the permit to be installed by the permittees."

Technical documentation of these results was given in a 1975 study conducted on company property titled: "Ecology and Management of Ducks in the Freshwater Marshes of Southeastern Louisiana". The project was supervised by Dr. Robert H. Chabreck of the LSU School of Forestry and Wildlife Management. Three Master of Science theses resulted (References 1,2,3). Other studies have also supported the positive aspects of LL&E's wetlands conservation projects (References 4 th 10).

The company is convinced that its efforts have contributed significantly in reducing wetlands' degradation. However, LL&E is constantly striving to improve the program to lessen losses and/or impacts, whether natural or manmade. With this in mind, LL&E has entered into an agreement with the Soil Conservation Service. Under the agreement, SCS conducts studies of existing conditions on company property and devises methods to retard salt water intrusion into less

saline areas, reduce erosion and land loss and improve vegetation and habitat in general. Priorities are established to concentrate conservation efforts on major problems. For example, if SCS determines that erosion is of paramount importance in a particular area, then erosion control receives top priority. Utilizing this approach, LL&E's current and future wetlands conservation programs will be a well planned and coordinated effort.

As a result of the cooperative effort with SCS, three marsh (wetlands) management units containing approximately 20,000 acres have been permitted for intensive management programs. Another unit containing about 4,000 acres is in the permitting process. A number of additional so-called "Marsh Management" Plans have been completed and are ready to be permitted. In line with the above recommendation, these should now be called "Wetlands Conservation" Plans.

Also, the company believes "Wetlands Conservation" to be much broader than what is normally thought of as "Marsh Management". LL&E has, through the years, participated in numerous "Wetlands Conservation" activities. Included is cooperation with various universities and government agencies and organizations in a broad spectrum of projects including financial support of research programs, donation of time, labor, equipment and the use of land on which to conduct studies and programs to survey wildlife. Sometimes the company has even helped move animals to areas with depleted stocks, and so on.

Some recent examples are:

- The company worked with the Louisiana Department of Wildlife & Fisheries to establish a brown pelican rookery on company property on Isles Derniere.

- The LSU Center for Wetland Resources has and is continuing to conduct studies at sites on LL&E property.

- At the East Golden Meadow Management Area, land was made available in June 1984 to the Soil Conservation Service for conducting plant experiments. In conjunction with the Louisiana Department of Natural Resources and other agencies, SCS is focusing on developing superior erosion control plants and cultural treatments and techniques for the conservation of Louisiana marshes. Once plants are developed in the lab, they will be field tested in actual marsh conditions, plus existing unvegetated areas will be replanted. In 1988 the test site was expanded and designated as a Soil Conservation Plant Materials Center - the first such center in Louisiana. Federal funds were appropriated for start-up in fiscal 1989.

- In May 1988, again working with the Soil Conservation Service, over seven hundred Black Mangrove trees were planted on Timbalier Island to replace those killed in recent years by hard freezes and Hurricane Juan. The trees were cultivated at East Golden Meadow.

- And one final example, LL&E has joined with the Louisiana Litter Control and Regulatory Commission in the "Adopt-A-Beach" program. The company adopted approximately 2.5 miles of the eastern portion of Timbalier Island. By adopting this beach, the company has agreed to conduct beach cleanup operations at least three times a year. Initial cleanup was in May 1988. The most recent was on Saturday, September 24, 1988 when over 60 company employees, families and friends participated in Louisiana Beachsweep '88. This was part of "Take Pride Gulfwide", a five state (Texas, Louisiana, Mississippi, Alabama and Florida) cooperative cleanup effort. Other companies, organizations and individuals are encouraged to "Adopt-A-Beach"; it's an excellent program.

LL&E has also conducted many in-house projects to better utilize wetlands resources. One prime example is a model alligator farm near Galliano, Louisiana. The farm was established with the hope that it will assist in developing the state alligator industry. Further, it should form the nucleus for a new industry, utilization of nutria meat, currently a much wasted resource, as food for alligator farms. The small farm is also capable of producing alligators to restock areas of low population or areas devastated by natural disasters.

The above synopsis of LL&E's wetlands conservation accomplishments is given to make three points: First, to illustrate that the company does care about the wetlands and associated problems- particularly land losses. Second, for years LL&E has actively worked to solve these problems. Third, we believe our efforts have yielded positive results and this view is supported by scientific studies.

However, the company is completely frustrated by the current regulatory scheme which seems to thwart rather than encourage wetlands conservation. At the core of the problem is the complex dual permitting system for wetlands activities. Under the current dual state and federal permitting systems for activities in the coastal zone, different commenting agencies, on both the state and federal level, provide input on all permit applications. In many instances, these views conflict because of the different interests of the different agencies. As a result, LL&E has found it to be extremely time consuming, difficult and in some instance impossible to pursue wetlands conservation-type projects under the dual permit scheme. In fact, the company has even rejected permits because the proposed terms are so different than those applied for that the intended goals could not be achieved. Who suffers the most? The wetlands. Louisiana loses about 1 acre of wetlands every 15 minutes, the time it takes to read this paper.

The situation is even more frustrating in attempting to permit "Marsh Management" Plans. As mentioned earlier, the company has a number of these plans completed and ready to be permitted. However, permitting is not being actively pursued. Why? First, LL&E believes that under the existing political and regulatory climate, it would be virtually impossible to obtain permits. Therefore, why waste time,

money and energy? Second, the company is aware of the complex monitoring programs recently proposed as permit conditions for other companies' "Marsh Management" Plans. LL&E simply cannot afford to conduct such costly sampling and analysis programs that it now appears will be standard requirements in the future. Again, who suffers the most? The wetlands.

There are some measures, however, that LL&E believes could be taken to rectify these problems:

1. Eliminate duel state and federal permits.
2. Streamline the permitting process.
3. Whichever level, state or federal, ends up with the permitting functions should use one umbrella agency to administer a comprehensive wetlands program. However, it should be stressed that such an umbrella agency should not just be another competing group added to the system.

4. Other recommendations are:
   A) "Marsh Management" Plan or "Wetland Conservation" Plan permits should be issued for a term of five years for new construction with an additional five years for maintenance.
   B) Monitoring requirements under a "Marsh Management" Plan should be limited to annual field reviews conducted by the Soil Conservation Service of those areas where authorized work has actually been performed.

Finally, it is suggested that tax and/or other financial incentives be given to landowners to encourage initiation of preventive maintenance programs and to maintain programs already in place. Related research projects should receive similar support.

LL&E is confident that implementation of these recommendations will help all of us, collectively, to achieve the goal of preserving our remaining precious wetlands heritage.

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STATEMENT OF VERNON BEHRHORST TO THE SENATE ENVIRONMENT AND PUBLIC WORKS COMMITTEE, ENVIRONMENTAL PROTECTION SUBCOMMITTEE, WASHINGTON, D.C., AUGUST 2, 1989.

Mr. Chairman, and members of the subcommittee, on behalf of all who participated in preparation of this statement, I extend our thanks for the opportunity to share our views on ports, waterways and water transportation as they relate to S. 630, the "Louisiana Coastal Wetlands Conservation and Restoration Act."

An impressive group of organizations and trade associations, who have as their reason for being the planning, construction, operation and maintenance of the most efficient, cost-effective and safe ports and waterways network our nation can possibly have, joined together in preparing this statement. Those with national membership and interests are the American Association of Port Authorities, The American Waterways Operators, the National Waterways Conference, Offshore Marine Service Association and the Water Resources Congress. Regional organizations are the Gulf Intracoastal Canal Association and Inland River Ports and Terminals. State interests are represented by the Louisiana Association of Waterway Operators and Shipyards, Louisiana Intracoastal Seaway Association and the Ports Association of Louisiana. All have a direct and vital interest in management of Louisiana's and our nation's coastal wetlands in a manner that will insure sustained productivity of this important resource.

Included in the findings, in Section 2(9), is a statement on the importance of Louisiana's ports and waterways to our nation. This is greatly appreciated. The task before us is to craft legislation that will achieve the purposes of S. 630 while assuring that these ports and waterways continue to serve their intended functions. This can be done. We are here to help.

Our concern and involvement in wetlands issues can readily be understood from the fact that most of the cargo carried by ships and barges - foreign and domestic - moves over natural and man-made waterways passing through coastal wetlands. On the rocky coasts of New England and the Northwest, these wetlands may be very narrow and disconnected. Nevertheless, they are vital components of the natural systems of these regions. Around Chesapeake Bay and along the Gulf Coast, they are far more expansive. Our concern can best be illustrated by the Gulf Intracoastal Waterway which passes through coastal wetlands for almost all of its 1,200 mile length from St. Marks, Florida to the Mexican border. Furthermore, within Louisiana's coastal wetlands, which are up to forty miles in width, we have the juncture of the GIWW and the Mississippi River - the major waterway crossroads on planet Earth.

The waterways network branching out from this crossroads is a major contributor to our nation's competitive position in foreign trade, especially in grain and coal. Twenty-two thousand jobs are generated by this network in the Port of New Orleans, and thousands more in factories, in mines and on farms throughout the nation depend upon it.

The magnitude of the tonnage of cargo moving through these wetlands is comparable to that of the wetlands themselves. In 1987, two billion tons of waterborne commerce passed through our ports and over our waterways. Half of this was foreign commerce moving through our coastal and Great Lakes ports. Three hundred million tons were shipped coastwise, 100 million tons were shipped between ports on the Great Lakes, and 600 million tons moving over inland and intracoastal waterway made up the remainder. Somewhere along its journey, almost every one of these two billion tons passed through coastal wetlands or over rivers fringed by wetlands. This in not a phenomenon of recent history. This has been the case since man realized the ease and

economy of transporting himself and his belonging on objects that float.

Focusing closer on Louisiana, the size of the wetlands and volume of waterborne commerce become even more impressive. In 1987, Lower Mississippi River deep draft ports - Baton Rouge, South Louisiana, New Orleans and Plaquemines - and Lake Charles in the southwestern corner of the state, handled 315 million tons of foreign and coastwise commerce while the Gulf Intracoatal Waterway caried an additional 85 million tons of commerce across the state in barges. Most of this cargo had its origin or destination outside of Louisiana. This 400 million tons does not include cargo carried in barges on the Mississippi River and other shallow draft waterways of Louisiana, crude oil passing through the Louisiana Offshore Oil Port and the million of tons of drilling equipment and supplies shipped from smaller coastal ports to sustain the oil and gas industry on the continental shelf.

Succinctly stated, 25% of our nation's foreign and domestic waterborne commerce passes through an area containing 40% of our nation's remaining coastal wetlands. These two statistics explain very clearly why we want to be involved in today's dialogue, and why we must be full partners in the development and implementation of the management program proposed in this bill before us. Furthermore, these statistics evidence a national interest in both the managing of our coastal wetlands and providing the efficient, safe and cost-effective water transportation infrastructure required for shipping our foreign and domestic commerce, transporting the tools and supplies for our offshore minerals industry and maintaining safe harbors for our fishing fleets which harvest the bounty of seafood which has its origin in these wetlands.

At this point, I wish to mention that, although S. 630 is the subject of this hearing, this statement is applicable in varying degrees to other bills before Congress that address wetlands and related issues.

The immediacy, immensity and complexity of the tasks demand that all work together. Those involved in ports, waterways and water transportation endeavors possess knowledge, talents and experience in such fields as engineering, economics, materials logistics and marine safety. Others have biological, hydrological, public health and marine resources management capabilities. These resources must be collectively applied to the task before us. Within our organizations and associations are many who are willing to participate in this effort, sharing their knowledge, talents and experiences and waiting for the opportunity to learn from others.

S. 360 would establish the mechanism for developing the plan, implementing the plan and providing financing for planning and ongoing management. Detailed concerns can be addressed when the mechanism is set in motion. At this time I wish to share with you several matters which should be given attention during the legislative process. They may seem small now to some but will be very important in the future. In addition to these comments, individual associations and organizations may provide written comments on specific provisions of the bill.

With regard to participation, S. 630 is not very explicit, other than "assuring an opportunity for comment and review. . ." Comment and review are after-the-fact provisions. Three groups involved in wetlands - argiculture, landowners and ports and waterways - are on this panel. There are others. A workable plan depends upon their participation in the planning process, not just in "comment and review."

In 1966, I personally participated in an effort to develop a plan for multipurpose wetlands management in Louisiana. With several other Louisianians

I came to Washington seeking support. We received it, and Congress authorized the Louisiana Coastal Area Study which is still the primary vehicle for Corps of Engineers participation in wetlands management in Louisiana. We are miles ahead in developing a plan because of that authorization. It was a forward step, but improvement is needed. Clear authority for the Corps of Engineers to participate in wetlands projects is essential. It is contained in Section 15 of S. 630 which provides for "equal priority with projects relating to navigation and flood control." By clearly giving wetlands projects this status, their merits, benefits and costs can readily be assessed and sources of funding identified. This is of great concern because of budgetary constraints which apply to Corps of Engineers funds appropriated out of general revenues of the Treasury. Under this condition, operations and maintenance funds are especially vulnerable to being diverted to other purposes, deferring maintenance and hoping to make it up in subsequent years. Furthermore, Section 5(c)(4) provides that wetlands projects, "shall be deemed to have a favorable benefit to cost ratio for purposes of Federal law." This provision can greatly distort the planning, prioritizing and funding process since navigation and flood control projects do not have this favored status. It must be clearly understood that funds for these projects are to come from the Wetlands Conservation and Restoration Fund provided for in Section 12, and that funds for Corps of Engineers ports and waterways projects will not be reduced.

I must remind you that water transportation companies contribute significantly to the construction, operation and maintenance of ports and waterways. This year's Corps of Engineers budget request includes expenditures of $119 million from the Inland Waterways Trust Fund and $164 million from the Harbor Maintenance Trust Fund. These trust funds are supported by private sector contributions.

Use of a portion of revenues derived from mineral activity on the Outer Continetal Shelf can be a sustained source of revenue for construction and operation of wetlands management projects. The State of Louisiana is planning to obtain its share of funds from a like source - state owned water bottoms out to the three-mile limit. Caution should be exercised to insure that the industry which pays the rents, royalties and bonuses is not adversely impacted.

Wetlands projects and navigation projects can complement each other. Water and sediment diversion, use of dredged material for marsh creation and structures for marsh management and prevention of salt water intrusion are examples of this that are already taking place. Fresh water is being diverted from the Mississippi River and projects are being planned or are under construction for larger diversions from the Mississippi River and the Gulf Intracoastal Waterway in western Louisiana. In this same area, navigation locks provide for water management in the marshes of the Mermentau Basin and prevent salt water intrusion.

Dredged material is being used for marsh creation, particularly near the mouth of the Mississippi River and along the GIWW. The Corps of Engineers dredges 400 million yards of material each year from navigable waterways, 74 million of them in Louisiana. Ninety-five percent of this is clean, uncontaminated material. The Corps of Engineers already has created 25,000 acres of wetlands with dredged material, 3,000 in coastal Louisiana, and plans on creating 40,000 additional acres. A great opportunity exists here for beneficially using much more of this material. Regulations and budgetary constraints limit the Corps ability to move dredged material any great distance. Using funds from the Wetlands Conservation and Restoration Fund to pay the additional cost of transporting dredged material to areas where it can be used beneficially will facilitate "piggybacking" on established dredging programs. In places

where sites for placement of dredged material are already limited, this could provide added benefits.

Also, where navigation channels are found to be suitable conduits for the diversion of fresh water, additional benefits from existing navigation projects can be obtained for our wetlands at minimal cost. Consideration will have to be given to delays at locks which are already increasing cost of operation; the Industrial Canal Lock at New Orleans being the prime example. Furthermore, sediments may be deposited in waterways used as conduits for fresh water diversion. If so, the cost of removal should not be charged to maintenance dredging for navigation but to the project purpose - wetlands management.

Implementation of the program proposed in this bill can open the door to opportunities for wetlands enhancement through cooperation of waterways interests and those involved in wetlands management. Navigation channels and structures can play major roles in this endeavor. I have given you examples of what has been or is being done; there are others. Success will depend upon understanding of each project's purposes and agreement upon the operational procedures required to fulfill project purposes, with cost allocated accordingly.

Section 10 of the bill provides that the regulatory program developed by the state shall supercede the provisions of Section 404 of the Water Pollution Control Act. Although I am not overly optimistic, this could be a vehicle for redoing the regulatory program at least in coastal Louisiana where the greatest number of 404 permits has been issued. Several months ago, I assisted in organizing a seminar on environmental issues impacting upon ports and waterways and served as moderator of the panel on wetlands. Participants

were unanimous in stating that 404 is not working as a wetland management tool. This included those who help write the laws and regulations as well as those being regulated.

Whatever is done, there must be reliability and predictability in the regulations developed. In gathering information from collaborating organizations and associations, the most frequently mentioned problems they insist must be addressed are the inconsistancies in interpreting laws and regulations, unreasonable mitigation requirements and delays in issuing permits. Investments in public port facilities, private terminals and equipment are long-term capital investments. Attracting investments where these conditions exist will be difficult. For example, the Port of New Orleans is preparing plans for a $187 million capital improvement program. They are entitled to reasonable assurance that regulations will not unduely delay or hamper this program which is so vital to the port's future. Others can be expected to accept no less.

I urge caution in setting federal statuatory requirements for a single state's regulatory program, in this case my home state of Louisiana, which may lead to regulations that will differ greatly from those of neighboring states. Section 8, prescribes that the state's standards for permit review be "at least as stringent" as for 404 permits. The "at least" is of concern. How much more stringent can they be? Some have labeled this a license for overkill. It certainly is an invitation to move fleets and terminal operations to neighboring states if overly-stringent regulations are promulgated. In a related issue, this very situation currently exists with vapor recovery regulations being proposed for tank barges and tankers. Please consider the impact of this provision.

These are major areas of concern to us which must be addressed in drafting

the legislation itself, as the legislation contains the guidance for program development, implementation and on-going operation. We present these concerns, based upon our collective experience, to aid you in developing legislation that will provide a viable wetlands management program while assuring the viability of the water transportation infrastructure associated with these wetlands. Our interest and that of the public will be best served by a cooperative endeavor.

Thank you.

TESTIMONY OF THE LOUISIANA FARM BUREAU FEDERATION
PRESENTED TO THE SENATE ENVIRONMENT AND PUBLIC WORKS COMMITTEE
SUBCOMMITTEE ON ENVIRONMENTAL PROTECTION
UNITED STATES SENATE
REGARDING S. 630, THE LOUISIANA COASTAL WETLANDS
CONSERVATION AND RESTORATION ACT
PRESENTED BY
MARTIN CANCIENNE, SECOND VICE-PRESIDENT
THE LOUISIANA FARM BUREAU FEDERATION
AUGUST 2, 1989
WASHINGTON, D.C.

Mr. Chairman and members of the subcommittee, my name is Martin Cancienne, and I serve as Second Vice-President of the Louisiana Farm Bureau Federation (LFBF). I also serve as Chairman of the LFBF Sugar Advisory Committee. I am a sugarcane producer from Assumption Parish. Thank you for the opportunity to present to the subcommittee the views of the Louisiana Farm Bureau Federation as it pertains to S. 630, The Louisiana Coastal Wetlands Conservation and Restoration Act.

I would like to begin my remarks by indicating that LFBF believes that something must be done to both minimize and to turn back the clock on future coastal wetlands losses in Louisiana. This is evident in the fact that Farm Bureau has had a long standing policy regarding coastal zone management which states that Farm Bureau work in cooperation with other groups to draft legislation acceptable to agriculture which addresses the coastal erosion problem.

Coastal land loss in Louisiana continues in catastrophic proportions. Current loss rates are estimated at 40-50 square miles each year. If this trend continues, 1500 additional square miles of marsh will vanish by the year 2040. Wetland loss along the coast threatens valuable agricultural land which has been in production for decades. Many agricultural commodities are raised in the parishes which border the Gulf of Mexico. For several of these commodities, wetlands play a vital role in production. Rice, for example, is a native wetland crop species which is very dependent upon a permanent, adequate supply of fresh water for its production. Farm Bureau policy supports the development of a plan to control salt water intrusion from the Gulf of Mexico into streams used for irrigation in Louisiana.

Sugarcane is grown commercially in 17 parishes, many of which border the Gulf coast. Several southeastern parishes where the majority of the coastal erosion is being experienced, in particular, Lafourche, St. Mary, and Terrebonne, together account for more than one-fourth of the state's total production. Producer income from this one industry accounts for 83 percent of total cash receipts received from all crops raised in these parishes. Many small communities and businesses are dependent upon the continued prosperity of this industry.

Two years of devastating back-to-back freezes in the early eighties all but made the Louisiana citrus industry a thing of the past. Many producers have since replanted and expanded their orange and grapefruit groves in Lafourche and Plaquemines parishes in the hope of never experiencing a killer freeze for another hundred years. However, the further encroachment of salt

water threatens the future well-being of not only this industry, but all agricultural enterprises along the state's coastal region.

The Louisiana commercial marine fishing industry is the largest in the nation. Our wetlands serve as the incubator for 90 percent of the commercial fish that are landed in the Gulf of Mexico. Without wetland nursery grounds, gulf fisheries production would decline significantly from current levels of 36 percent of the national harvest. Louisiana leads the nation in commercial seafood production, accounting for 60 percent of the menhaden, 40 percent of the shrimp and 30 percent of the oysters harvested in the United States. As a result of this productivity, Louisiana has four of the top five ports in the nation in terms of volume of fish landed. The economic impact of commercial fishing in Louisiana is estimated at $2.3 billion, excluding menhaden. The economic impact of recreational fishing is $500 million. Many individuals and numerous businesses throughout the coastal region are solely dependent upon the viability of this industry. However, the commercial fishing industry has seen better days. Over the past several years, this widely divergent industry has experienced declines in production. Limitations on catches of various species of marine life have had to be imposed in order to prevent possibly endangering the populations. This decline in populations is not the result of negligence in harvesting as some people have advocated, but can be directly linked to the ever vanishing estuaries as the result of the dwindling coastline. As you are able to realize from these examples, agriculture has a lot at stake.

Louisiana wetlands provide wintering habitats for 66 percent of the migratory birds using the Mississippi Flyway, supporting a recreational hunting industry worth $58 million annually. Also, Louisiana has been the number one producer of raw furs in the United States for as long as records have been kept.

We support the maintenance of the private property rights of U.S. citizens to make whatever use of their property they want as long as it does not adversely affect the property rights of others. In any discussion about wetlands protection, it is helpful to remember that for much of our history, wetlands have been viewed as a problem to be eliminated rather than a resource to be protected.

It should be realized that regulatory programs alone will not halt wetlands alteration or deterioration. Instead, emphasis on increased economic incentives to landowners such as wetlands reserves, easements, and cost sharing for restoration should be considered. This approach should promote cooperation rather than confrontation. In addition, increased information and education to wetlands owners on the significance of wetlands will promote public awareness and understanding.

The wetlands found along our coastline are unique to Louisiana. Nowhere else in the United States will you find such an ecosystem. For this reason, we recommend that any definition or interpretation used in defining exactly what constitutes a wetland be broad in nature. Currently used definitions vary not only among and within federal agencies, but at all levels of government. It is unrealistic to think that it would be possible to achieve one single definition that will be applicable to cover

all regions of our nation. Much of the fertile agricultural crop land located in the coastal parishes would probably be classified as wetlands if the same interpretation used for designation of a wetland in the Midwest were applicable to Louisiana. USDA Soil Conservation Service figures indicate that over 50 percent of the land farmed in Lafourche, St. Mary, and Terrebonne parishes is at a mean sea level of five feet or below. For this reason, we recommend that a field manual be devised containing broad descriptions of what constitutes a wetland by taking into consideration each section of the country's individual characteristics.

We recommend that the local USDA Soil Conservation Service be empowered to make all wetland determinations. Also, Farm Bureau strongly supports the existing Section 404 exemptions for agriculture as contained in the Clean Water Act.

The proposed law states that the governor shall designate a single agency or authority whose purpose will be to develop and administer a plan to restore the coastal wetlands within the state. We recommend that the Louisiana Department of Natural Resources (DNR) be the designated state entity. This department already has in place the experience and expertise to carry out the mandates set forth in this legislation. Once the state's proposal for restoration is completed, it must then be submitted to the Secretary of the Army and the Administrator of the Environmental Protection Agency for their approval. Prior to the initial meeting of the designated state authority, we recommend that an advisory council made up of the various state entities, including a representative for agriculture, be formed on the state level. The purpose of the advisory council will be to

allow for input from the respective state entities into the development of the specifications to be incorporated into the proposal.

Farm Bureau policy states that ten percent of future 8G revenues be used in the funding of a viable coastal restoration plan. However, we can support the proposed "Coastal Wetlands Conservation and Restoration Trust Fund" contained in the legislation as the means by which monies are made available for any proposed restoration projects.

In closing, I believe that agricultural production in the coastal regions of our state can be maintained at current levels of production while not having any bearing or adverse effects on the past or future deteriorations of our coastal wetlands. As I alluded to earlier in my presentation, agriculture only stands to lose if this problem is not swiftly and effectively addressed. Louisiana needs assistance as it strives to develop and implement a wetland preservation agenda. Without federal assistance, Louisiana's coastal wetlands which provide extensive national benefits will be lost forever.

I would like to commend Senator Breaux for his insight into realizing the magnitude of the problem and for his initiative to address the situation through authorship of this piece of legislation. Farm Bureau stands ready to work with you and other interested parties in addressing and resolving this matter.

Thank you for the opportunity to express these views. We look forward to working with you on this issue in the future. I will be glad to respond to any questions you might have.

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COMMENTS OF THE ENVIRONMENTAL DEFENSE FUND,
THE SIERRA CLUB AND THE WILDERNESS SOCIETY
ON S.630, THE
LOUISIANA COASTAL WETLANDS
CONSERVATION AND RESTORATION ACT
BEFORE THE SENATE ENVIRONMENT AND PUBLIC WORKS COMMITTEE

by: James T. B. Tripp, General Counsel

Introduction

Coastal Louisiana's wetlands are a nationally vital biological and geological resource. They constitute 40% of the coastal wetlands of the 48 states. They are eroding and subsiding at a rapid rate, representing 80% of the coastal wetland loss in the country. This is a national disgrace and an ecological disaster. The country's major, national environmental organizations concur with this assessment. There is therefore a strong federal interest in working with the State of Louisiana to address this debacle.

The causes of this loss are known. The federal government bears heavy responsibility for this loss. It should therefore be prepared to do its share to restore this remarkable wetland system. What is needed is a federal/state partnership to design and implement on a fast track a program of action to restrict future activities that may contribute to wetland loss, to restore particular wetland segments laced with abandoned canals and to divert sediment and fresh water of the Mississippi River to build new deltas.

For these reasons, we strongly endorse the overall thrust and objective of S.630. With some amendments and improvements that we are prepared to suggest incorporated, we would urge this Committee and the U.S. Senate to approve the Louisiana Coastal Wetlands Conservation and Restoration Act.

Coastal Louisiana as a National Resource

The Mississippi River is one of the great river systems in the world. It ranks in the top six in the world in terms of volume of water and sediment carried and discharged. It is by far the largest and longest river in the United States with headwaters extending from Yellowstone National Park in the west, Minnessota and Canadian provinces to the north to western New York and Pennsylvania in the east.

For millenia, the Mississippi River has been carrying more than 200 million tons of sediment to the Gulf of Mexico annually. Prior to the intervention of man, a portion of these sediments settled in shallow waters near the coast, slowly but steadily building a deltaic wetland mass. Periodically, about every 1000 years, as the delta around the River has grown, the River has shifted its course to the Gulf. These Mississippi River deltas have built the largest, most important coastal wetland system in the country. Few other comparable deltas exist in the world, none of them in this country.

This deltaic complex, which is coastal Louisiana, is a unique national biological and geological treasure. We should treat it with the same awe and respect that we do the Everglades, Georges Banks, the Grand Canyon or the mighty

Redwoods of northern California. It is enormously important for our coastal fisheries, for migratory waterfowl and other birds, and for all forms of wildlife. It is also culturally highly distinctive.

The Federal Role in Coastal Louisiana Wetland Degradation

Coastal Louisiana has been eroding at rates exceeding 40 square miles per year in recent years. The rate of loss has been accelerating since the turn of the century.

The causes of this loss are known, and the federal government has played a central role in activities contributing to this loss. Starting about 100 years ago, the federal government, through the Corps of Engineers, constructed a series of navigation and flood control levees and jetties extending into the Gulf to prevent Mississippi River sediments from settling in the passes of the mouth of the delta where they impeded navigation. Solving the severe maintenance dredging problem at the mouth of the Mississippi River served a major federal economic development objective. These levees and jetties, however, blocked the natural overbank flooding which brought sediment into the coastal marshes. Without such sediment inputs, the organic soils compact naturally, and the marshes subside and break into open water. Given the federal role in constructing this system and the importance of Mississippi River navigation to national economic well-being, the federal government has a major role to play in developing and implementing a program to mitigate the resulting massive wetland degradation.

The second major cause is the construction of more than ten thousand miles of canals and channels. Most have been dredged to provide access for oil and gas exploration and development equipment, for the placement of oil and gas pipelines and to facilitate navigation relating to this industry. Many of these navigation channels and pipeline canals constructed through coastal marsh service the off-shore oil and gas industry. The federal government has benefitted enormously from and has promoted this development. Further, under Section 404 of the Clean Water Act, the Corps of Engineers has the authority to regulate canal construction.

Obviously, the state, its coastal landowners and many of its residents have benefitted from this economic development, and many coastal communities have expanded into wetland areas through construction of forced drainage projects. But from any vantage point, the presence of the federal government in management or mismanagement of the Mississippi delta in coastal Louisiana and the federal responsibility for the devastating ecological destruction that this deltaic treasure is experiencing looms large.

The State's Response

The State's response to the loss of its coastal wetlands has been slow in coming. When Dr. Sherwood Gagliano reported in the early 1970's that the average annual rate of wetland loss in coastal Louisiana was 16.5 square miles per year, the state took no action; the oil and gas industry shunned any responsibility;

and the Corps continued to construct and expand navigation and other projects in the coastal marsh. Expressions of concern were restricted largely to the state's small environmental community and a group of courageous wetland scientists. When, in 1981, Dr. Gagliano reported that the rate of loss had been accelerating since 1900 and was estimated to be 40 square miles per year as of 1980, the state and many of its residents began to take notice.

With the approval of its coastal zone management program in 1980, furthermore, the state assumed direct permit authority to regulate many activities in its coastal wetlands. This program has gradually been strengthened in recent years and has contributed to a reduction in direct loss of wetlands due to canal construction.

In April 1987, the Coalition to Restore Coastal Louisiana issued its landmark report "Coastal Louisiana: Here Today and Gone Tomorrow? A Citizens' Program for Saving the Mississippi River Delta Region to Protect Its Heritage, Economy and Environment". That report, released in revised form in April 1989, helped to galvanize state action. It noted that, to do its part in implementing a plan of action for coastal Louisiana, the state would have to take two major steps: it would have to secure a source of state funds for coastal action, and it would have to establish one administrative entity - an office of coastal restoration and management - that would enable the state to speak with one, accountable voice on planning and

implementing state action programs in the coast. With the recent passage of State Senate Bill No. 25, the state has taken an important step in this direction. Clearly, introduction of S.630 helped to facilitate this state legislative action.

While the state has begun to take necessary steps to address coastal wetland loss and has much more to do, it cannot and should not be expected to act alone. The resources and talent of the federal government, in particular those of the Corps of Engineers and EPA, are vital.

The Louisiana Coastal Wetlands Conservation and Restoration Act

Enter S. 630. This bill contains an important set of findings, all of which we strongly endorse. These findings reflect the national importance of the coastal Louisiana wetland resource, its multiple values to the state and nation, the unacceptability of the high rate of loss of these wetlands to the nation and the need for a program that curtails wetland loss and promotes wetland restoration projects. The bill establishes as a goal that regulatable activities should not result in any net loss of wetlands.

The bill contains a number of elements which we enthusiastically endorse. It provides incentives to the state to strengthen its regulatory program consistent with the "no net wetland loss" goal applicable to current activities, to set up an administrative structure which is efficient and to develop a source of funding for coastal action. It recognizes that the

state must play a central role in planning and implementing a plan with both tough regulatory and wetland project components. It calls upon the EPA and the Corps of Engineers to play a co-equal role in providing assistance to the state, overseeing the planning process and approving the coastal plan.

The bill provides for federal funding of the state planning process and for substantial federal funding of wetland restoration projects. Since federal navigation and flood control projects have contributed substantially to wetland loss in coastal Louisiana, and little of this loss has ever been mitigated, this kind of federal funding is certainly warranted. The bill also establishes a source of funding - a percentage of OCS revenues. Given the substantial contribution of Louisiana OCS operations to this fund, the meager return that the state has historically obtained from these revenues and the fact that these operations have done little or nothing to mitigate their impact on wetland loss, utilization of this source makes eminent sense.

We would suggest a number of proposals to strengthen the bill as currently drafted to assure attainment of its lofty and worthy purposes. We mention three.

First, increased diversion of freshwater and sediment from the Mississippi and Atchafalaya Rivers is essential to any coastal restoration program. Such projects could cost considerable sums of money. Certainly, a project designed to construct an alternative navigation outlet to the Gulf above the

mouth of the River to allow for diversion of its sediment below that point would probably cost hundreds of millions of dollars or more. Such diversion projects will have to be designed and constructed for coastal restoration and a rejuvenated and functioning Mississippi delta to become a reality. For this reason, we support a very significant federal technical and financial contribution for these projects - a contribution that would serve as mitigation for past federal actions. By the same token, we want to make sure that this kind of federal support will not be made available for more traditional kinds of federal projects - sea walls, levees, marsh impoundments, pumps, flood drainage and similar structures. The environmental community has fought federal largesse for federal water resource development projects for too long. The act and the legislative history should be crystal clear as to what kinds of projects are intended.

In this connection, we point out that this bill can be an important vehicle to facilitate the transformation of the Corps of Engineers from being a water resource development agency to becoming an environmental engineering agency. With its vast engineering talent, the Corps is uniquely equipped to work on the design and construction of wetland restoration projects. The bill must make clear the distinction between the tradition work of the Corps and that of its future mission.

In this context, we also emphasize anther value of such diversion projects. The country is quite properly concerned

about climate warming, sea level rise and the impact of that rise on coastal resources. The kinds of sediment diversion projects which we envision for coastal Louisiana wetland restoration should be capable of creating and restoring wetlands in coastal Louisiana even in the face of accelerating sea level rise due to climate warming.

Second, while we strongly support development of a strengthened state regulatory program, we view the provision for rescission of the federal 404 program, absent formal compliance with Section 404(g) and (h) requirements, to be unnecessary, unwarranted and counter-productive. No matter how tough the state program is on paper, the quality of day-to-day implementation and enforcement is vital. A strong 404 program can be an important bulwark for a tough state program. For delegation of the 404 program to Louisiana to proceed, the state should be required to establish compliance with Section 404(g) and (h) criteria, and EPA should retain its 404(c) and oversight authorities.

Third, the development and implementation of a program of action for coastal Louisiana must be a joint federal/state responsibility. The plan of action should be a joint product of the state and, at the federal level, EPA and the Corps, rather than a plan prepared by the state with assistance from those federal agencies, as requested. The relationship should be that of a partnership. The skills that the Corps of Engineers and EPA, as well as other federal agencies, not to mention the level of financial support, warrant such a partnership.

Conclusion

Restoration of coastal Louisiana is a worthy national objectives and warrants aggressive federal action. Subject to the modifications outlined, we urge rapid approval of S.630.

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S.630; "LOUISIANA COASTAL WETLANDS CONSERVATION AND RESTORATION ACT"

Testimony as presented by Kirk Cheramie, Lafourche Parish Council, for hearing held on June 10, 1989
U.S. District Court Building
500 Camp Street, Courtroom C-501
New Orleans, LA 70130

The "Louisiana Coastal Wetlands Conservation and Restoration Act" represents the potential triggering mechanism to systematically and effectively address Louisiana's coastal land loss problem. The following commentary precedes formal recommendations to the Act for your consideration.

The State Plan should be based on basins and regions. The groundwork exists from previous studies conducted at the Federal, State, and Local levels as evidenced by two inventorial documents: Report on Measures to Maintain, Enhance, Restore, and Create Vegetated Wetlands in Coastal Louisiana (Coastal Restoration Technical Committee, August 17, 1988) and Prioritization and Implementation of Protection Measures for Louisiana's Coastal Wetlands (Coastal Environments, Incorporated, April, 1988). Specific plans exist which can be implemented immediately, complementing both the respective basin plan and the state's overall plan.

The basin approach would also benefit the no net loss concept. The Act does not provide for a definition; so therefore, statewide protection of one region might be at the expense of another. It is important that mitigation occur near the area to be impacted or at least in the same basin.

The word "local" is never mentioned in the Act. It is critical that local entities have input from the early stages. Progressive states such as Oregon, New Jersey, and Florida have coordinated successful land use/coastal law policies, all of which originated at the local level. Louisiana has an existing local network with planning and development districts which are ideally suited to coordinate the interface between locals and designated state agency administering the plan. These districts interact with individual parishes, receive input from elected officials, and can provide strategies for reaching the public.

The following are specific recommendations which local governing authorities feel must be made to alter the bill's language:

Section 4(6) - "restoration" means those activities intended to create, restore, or protect coastal wetlands by methods that include sediment and freshwater diversion, active and passive marsh management, and restoring and maintaining barrier islands.

Section 5(b)(2c) - regional planning and development districts provide forums for comment and review on the Plan, during the planning period, by the public and by Federal and State agencies; and

Section 5(c1) - the Secretary shall make grants, in the aggregate amount of $5,000,000.00 to assist the designated State department in developing the Plan with provisions for pass through grants to appropriate planning and development districts for plan coordination and public comment and review;

Section 5(c2) - the Secretary, the Administrator, Planning and development districts, and established Coastal Zone Management Citizen Advisory Committees shall provide technical assistance to the State to assist it in the development of the Plan;

Section 7(3) - designation of a Coastal Advisory Review Committee consisting of representatives from the U.S. Environmental Protection Agency, U.S. Army Corps of Engineers,

regional planning and development districts, and citizen groups for the purpose of reviewing proposed policies with the designated state agency.

Section 7(4) - The State shall amend, administer, and enforce the Louisiana Coastal Resources Program to require permits for development activities in wetlands and other waters in the coastal zone to assure a no net loss of such wetlands as a result of such development activities;

Section 7(5) - shall contain the verbage presently in Section 7(4)

Section 7(6) - shall contain the verbage presently in Section 7(5)

Section 7(7) - shall contain the verbage presently in Section 7(6)

Section 7(8) - An effective program to be carried out by the State for the purpose of educating the public of the necessity to conserve wetlands and that certain remedial actions will require understanding and compromise from user groups. Said program shall be budgeted and locally oriented and coordinated.

Section 7(9) - shall contain the verbage presently in Section 7(8)

Section 7(10) - shall contain the verbage presently in Section 7(9)

Section 7(11) - shall contain the verbage presently in Section 7(10)

Section 9(b3) - the plan was adopted and endorsed by 2/3 of the affected local governing authorities after reasonable notice and hearing.

Thank you for the opportunity to express these comments.

Testimony

Of

NEWMAN TROWBRIDGE, JR.
General Counsel, Louisiana Landowners Association, Inc.

Before the
Subcommittee on Environmental Protection
of the
Senate Committee on Environment and Public Works

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

My name is Newman Trowbridge, Jr. I am a resident of Franklin, St. Mary Parish, Louisiana, and I appear before you today in my capacity as General Counsel for Louisiana Landowners Association, Inc. The members of Louisiana Landowners Association own over 1.6 million acres of land within the State of Louisiana, much of which is wetland lying both within and without Louisiana's coastal zone.

Private landowners own approximately 4.4 million acres of the estimated 5.5 million acres of Louisiana's coastal wetlands; and accordingly, Louisiana's devastating coastal land loss adversely impacts no group greater than the coastal landowner. In view of these impacts, and in view of the desire of coastal landowners to cooperate in bringing about a solution to this problem, Louisiana Landowners Association is particularly grateful to you for your invitation to appear today and testify with regard to S. 630, the proposed Louisiana Coastal Wetlands Conservation and Restoration Act.

Primarily because of time constraints, I will not attempt to review this legislation line by line and suggest specific amendments. Rather, I will discuss the concept of the legislation and some of the issues which must be dealt with in addressing this most complex situation.

The causes of coastal wetland loss in Louisiana are numerous. They are both natural and human. The natural forces of subsidence, sea level rise and erosion are responsible for significant changes

in the relative land-water interface. Sinking land and rising water account for major coastal wetland losses. Human activities in the coastal area have also accounted for significant losses.

Among man's activities, it is generally accepted that the construction of levees along the Mississippi River is responsible for large wetland losses by confining the river and preventing the annual overflow cycle during which the river would flood the marshes with sediment-laden water. In addition, channelization, oil exploration, as well as agricultural, urban and industrial expansion have contributed to wetland losses.

In view of the nature of the causes of wetland loss, most experts have identified various structural measures as essential elements in any program intended to reverse these losses. These structural measures include diversion of water and sediments from the Mississippi River into the marshes, the creation of new marsh utilizing dredge material from maintenance of navigation channels and other similar sources and the management of high organic soil marshes to prevent erosion by destructive marine tidal processes. While the economics of these measures are currently being studied by the State of Louisiana and the Corps of Engineers, it is no secret that the costs associated with pursuing these endeavors on a scale large enough to reverse current losses will run into the hundreds of millions of dollars. Most appropriately, S. 630 recognizes both the essential nature of these structural measures to a successful resolution of the problem and recognizes, in its funding provisions, the substantial costs to be incurred in implementing those

structural measures.

Given the high costs of implementing a structural program of sufficient magnitude to have a reasonable chance of success, a threshold question exists as to whether there is a sufficient national interest to justify the expenditure of these sums by the federal government. In our opinion, the answer to that question is emphatically in the affirmative.

The United States has made a substantial investment in coastal Louisiana. The largest flood control project in the world, the Mississippi River and Tributaries Project, is being built in Louisiana, as well as the largest hurricane protection program in the nation. The terminal point for the entire Mississippi and Ohio River navigation system lies within Louisiana's coastal marshes. Major portions of these flood control, hurricane protection and navigation projects will be threatened as the marshes that protect them from erosion are lost. If for no other reason, there is a substantial national interest in protecting the investment of the federal government through the expenditure of federal dollars in an effort to reverse Louisiana's coastal losses. The financial burden of this mission is more than the State of Louisiana alone can bear. The failure of the federal government to lend significant assistance would surely lead to the eventual loss of federal, as well as state, local and private investments in the area.

An additional method identified by which to address wetland loss is regulation of development. Most proposed regulatory responses, as is the case with S. 630, include the adoption of a

policy of "no net loss" of wetlands which would, at a minimum, require full mitigation of all wetland losses associated with development activities and would require the denial of permits for non-water dependent activities. Perhaps because of costs associated with structural measures, perhaps because of a sense of urgency coupled with the fact that regulatory features can be addressed immediately without additional direct costs, it is this regulatory aspect which appears to be receiving the greatest emphasis. This theme appears repeatedly throughout the provisions of S. 630; and while this may be a desirable goal in theory, there are many problems inherent in the application of such policies in a state such as Louisiana in which such vast expanses of land are considered wetland.

All wetlands are not coastal wetlands and all coastal wetlands are not marshlands being washed away by subsidence and erosion. On January 10, 1989, the Department of Army, Fish & Wildlife Service, Environmental Protection Agency and Soil Conservation Service adopted by agreement the new "Federal Manual For Identifying And Delineating Jurisdictional Wetlands", which manual became effective March 20, 1989 and which for the first time adopted a single approach to be utilized by all federal agencies in delineating jurisdictional wetlands pursuant to Section 404 of the Federal Water Pollution Control Act (33 USC 1334 et seq). A mere reading of this new manual leads to the clear conclusion that those lands to be considered wetlands for purposes of regulatory jurisdiction have been greatly expanded. For instance, areas which were once wetlands

and "disturbed" or "altered" to convert to other uses may, in many instances, now be considered jurisdictional wetlands subject to dredge and fill permitting requirements.

This significant problem of what is and what is not a wetland is exacerbated by the establishment of Louisiana's coastal zone boundary in the Louisiana Coastal Resources Management Act of 1978 (La. R.S. 49:213.4). Extensive areas have been included within Louisiana's coastal zone boundary that do not require management or restrictions upon use. That boundary was extended at the insistence of a number of parishes who wanted to be included within the coastal zone to qualify for receipt of Coastal Energy Impact Funds to be distributed as part of the federal coastal zone program, which funds have been long non-existent. Accordingly, the entirety of many coastal communities are included within Louisiana's coastal zone and are situated on lands which were altered by levees which protect them from rising waters or otherwise disturbed in the sense contemplated by the new federal manual.

Over two million people live and work in coastal Louisiana and the region supports approximately forty-five (45%) percent of the state's population. Population, employment and land use projections clearly indicate that there is an insufficient supply of available non-wetland sites to accommodate foreseeable future land use needs. There are, in fact, significantly fewer practicable alternative non-wetland sites in Louisiana than in other states. Considering these facts, the "presumption" of available non-wetland sites for non-water dependent activities provided in EPA's 404(b)(1)

Guidelines is essentially illusory.

Happily, S. 630 recognizes that the principal management decision making should rest with the state as it is clearly in a better position to evaluate the impacts of proposed projects. However, Section 8 of S. 630, by requiring the permit program to incorporate standards essentially the same as the 404(b)(1) Guidelines, and further requiring no net loss of wetlands as a result of development activities, removes from the state any flexibility with respect to its decision making and fails to properly recognize, particularly in a state such as Louisiana, there will necessarily be a continuing requirement for economic, social and other activities of man which will undoubtedly result in some wetland loss.

In addition, in its current condition, this legislation fails to adequately recognize the fact that all wetlands are not of equal value. The principal justification for the adoption of a no net loss policy with regard to wetlands is the vital function which those wetlands perform. The resource value of all wetlands, however, is not equal and there must be a more realistic evaluation of the value of wetlands proposed for development. Particularly is this true in a state such as Louisiana where so much of the state is characterized as wetlands and where alternative sites for development are so few. Where the removal of the wetland through development will not result in a significant adverse impact upon the aquatic ecosystem, permit denial or the imposition of impractical or economically infeasible permit conditions should not be warranted.

To aid in this evaluation process, wetlands should be divided into categories depending upon their public benefit value and special planning zones should be recognized in an effort to avoid unresolvable conflicts by identifying these zones and establishing a systematic planning procedure. Impounded wetland areas, such as those within flood protection levees, are examples of the types of lands which should be included within special planning zones.

I would suggest to you that the public perception of what constitutes a wetland is far more limited than that contemplated by the new federal manual and that promoted by many groups such as the National Wetlands Policy Forum. However, even assuming that the public consensus for action would support a complete halt of all development activities within coastal wetlands, and even the relocation of communities dependent upon those activities for their very survival, it is important to understand that Louisiana would continue to suffer staggering wetland losses. While the estimate of the contribution of present day activities to the overall loss varies among the experts, it is clear that those losses are insignificant in relation to the losses caused by subsidence, erosion and the leveeing of the Mississippi River. It is pure folly to believe that wetland losses can be reversed through regulatory responses, no matter how severe.

Although the need to conserve and restore wetland areas is widely recognized, it is essential in achieving these purposes that it be done in a manner that does not halt essential commercial,

industrial, manufacturing, residential and recreational uses and activities in areas of the coastal zone that would not cause or contribute to further coastal erosion or the loss of significant wetland values.

Having discussed generally the approach of S. 630 to both the structural and regulatory responses to wetland loss, I would like to briefly mention two areas which we believe are critical but which the proposed legislation does not address. Those areas deal with the utilization of the private sector and avoidance of public-private conflicts.

Without doubt, S. 630 should emphatically recognize the value and encourage the participation of the private sector in wetland conservation and restoration. Landowners have for some time exhibited a willingness to initiate wetlands management programs on their property in an effort to save their lands and increase its productivity. These management programs normally entail semi-impoundments or impoundments of water and they have not been without controversy primarily because of their perceived impact on fishery resources and the fact that access is sometimes restricted in the vicinity of these projects. As a result, the permitting process with respect to these programs has been difficult, to say the least. Without question, the value of these programs must be recognized and encouraged by offering landowners tax and other financial incentives to initiate and maintain these management programs and by allowing a permit process which facilitates rather than frustrates the implementation of these programs.

Equally without question, potential public versus private conflicts and takings implications should be avoided. Those lands with the highest public benefit value will obviously be subjected to significant restrictions upon implementation of any proposed no net loss and water dependency standard. To prohibit the use of wetlands for development purposes will effectively deprive the landowner of all beneficial use of the property and raise the issue of a taking. Additionally, as diversion structures and marsh creation programs are put into place, there will undoubtedly be serious questions raised as to the public versus private ownership of the newly created marsh. It is important, in our opinion, to the success of the efforts to reverse coastal land losses in Louisiana that these issues, to the maximum extent possible, be avoided. To this end, provisions should be added to S. 630 which would provide as follows:

a) Those wetlands having the highest public benefit value should be considered either for fee acquisition or for the acquisition of surface use easements. The acquisition price should be based not on the traditional market value approach, but rather on the renewable resource value and public benefit value of the lands acquired.

b) Conflicts have already developed in coastal waters with regard to public versus private rights. For the most part, these conflicts have revolved around public claims to rights of passage through privately constructed canals. As public dollars are expended to achieve marsh creation and regeneration through

structural measures, these conflicts will undoubtedly exacerbate and involve not only coastal waterways but also the lands created. In an effort to reduce these conflicts, the establishment of property boundaries as of a specified date by agreement between the state and private owner should be pursued. These agreements would provide public access to all areas subject to the agreements and would reserve to the private owners the ownership of subsurface minerals, irrespective of erosion or accretion.

In conclusion, it is our opinion that S. 630 provides a substantial beginning to the development of a federal-state cooperative program designed to deal with a unique, complex and devastating problem. Senator Breaux is to be applauded for his initiative in this direction. However, as evidenced by our testimony, there are several areas in which we find S. 630 deficient in its particulars. In an effort to explore and define these areas with greater particularity, we are prepared to make available to the Subcommittee and Senator Breaux, at your convenience, scientists and other personnel with decades of experience in Louisiana's coastal areas who would be pleased to share with you their experience and knowledge of the complex issues involved in the development and implementation of a program to address these coastal losses. Again, let me express to you our sincere appreciation for the invitation to appear and to share with you some of our thoughts on this most important issue.

TESTIMONY OF

R. MICHAEL LYONS
EXECUTIVE VICE-PRESIDENT

LOUISIANA DIVISION
MID-CONTINENT OIL AND GAS ASSOCIATION

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENTAL PROTECTION
OF THE
SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

GOOD AFTERNOON, MY NAME IS MICHAEL LYONS AND I AM EXECUTIVE VICE-PRESIDENT OF THE LOUISIANA DIVISION OF MID-CONTINENT OIL AND GAS ASSOCIATION. MID-CONTINENT IS PLEASED TO BE A PART OF THIS HEARING THIS AFTERNOON. WELCOME TO LOUISIANA.

LOUISIANA MID-CONTINENT IS A TRADE ASSOCIATION REPRESENTING INDIVIDUALS AND COMPANIES WHO PRODUCE, TRANSPORT, REFINE AND MARKET OVER 90% OF THE OIL AND NATURAL GAS PRODUCED IN OR TRANSPORTED THROUGH LOUISIANA. THE ASSOCIATION HAS REPRESENTED THE LOUISIANA OIL AND GAS INDUSTRY SINCE 1919.

* * *

YOU ARE ADDRESSING THIS AFTERNOON AN ISSUE OF PARAMOUNT IMPORTANCE HERE IN LOUISIANA AND TO THIS NATION: THE LOSS OF SOME 35-50 SQUARE MILES OF COASTAL WETLANDS ANNUALLY. SENATOR BREAUX HAS DESCRIBED THIS PROBLEM VERY WELL ON NUMEROUS OCCASIONS. THE MAGNITUDE OF THE LOSS IS SHOCKING; ALMOST UNBELIEVABLE. WE ARE LOSING THE ESTUARY OF ONE OF THIS COUNTRY'S GREATEST FISHERIES.

IN ADDITION TO BEING A GREAT FISHERIES RESOURCE, LOUISIANA'S WETLANDS PROVIDE PRIME HABITAT FOR DUCKS, GEESE, SONG BIRDS, FUR-BEARING ANIMALS, DEER AND MANY OTHER GAME AND COMMERCIAL SPECIES. THE AREA INCLUDES SOME OF AMERICA'S

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RICHEST FARMLAND. IT, ALONG WITH THE LOUISIANA OCS, ALSO PRODUCES 14 PERCENT OF AMERICA'S OIL AND 25 PERCENT OF THIS NATION'S NATURAL GAS. LOUISIANA RANKS NO. 2 IN U.S. OIL PRODUCTION AND NO. 3 IN GAS PRODUCTION. IT IS AMERICA'S OLDEST AND GREATEST PRODUCER OF OFFSHORE OIL AND GAS. OFFSHORE LOUISIANA HAS PRODUCED SOME $54 BILLION FOR THE U.S. TREASURY SINCE 1953 WHEN THE FIRST OCS PRODUCTION IN THE U.S. WENT ONSTREAM OFF LOUISIANA'S COAST. OF 11,440 OFFSHORE OCS OIL AND GAS WELLS, 10,500 ARE OFFSHORE LOUISIANA (THAT'S 92 PERCENT!) **THIS IS OBVIOUSLY AN AREA OF MULTIPLE AND GREAT NATURAL RESOURCES. THERE IS NOTHING LIKE IT ANYWHERE ELSE IN AMERICA.**

WE NEED LEGISLATION SUCH AS S. 630 TO PROTECT THIS TREMENDOUS RESOURCE. WHILE IT IS DOUBTFUL, IN MY OPINION, THAT WE CAN REVERSE LOUISIANA'S HIGH WETLAND LOSS RATES ANYTIME SOON, WE CAN SLOW THE RATES DOWN. HOPEFULLY ONE DAY WE CAN REVERSE THE TREND.

\# \# \#

BEFORE WE DISCUSS SOLUTIONS TO LOUISIANA'S WETLAND LOSS PROBLEM, WE NEED TO UNDERSTAND THE MANY FACTORS AT WORK WHICH ARE CAUSING THE PROBLEM. WE CAN ALL AGREE ON WHAT THE CAUSES ARE: SUBSIDENCE, SEA LEVEL RISE, THE CYCLICAL NATURE OF THE DELTA BUILDING PROCESS, THE MISSISSIPPI RIVER LEVEE SYSTEM, THE OLD RIVER CONTROL STRUCTURES, NAVIGATIONAL CHANNELS, OIL AND GAS ACCESS CANALS, HURRICANES, BIOLOGICAL FACTORS,

CONVERSION TO FARMLAND, URBANIZATION. THESE ARE BUT SOME OF THE MANY AND VARIED CAUSES OF LOUISIANA'S LAND LOSS.

WHAT WE DISAGREE ON IS HOW TO ALLOCATE CAUSATION. HOW MUCH LOSS IS ATTRIBUTABLE TO SUBSIDENCE? HOW MUCH TO SEA LEVEL RISE? ETC. ETC. WE DON'T KNOW AND WE MAY NEVER KNOW.

WE DO KNOW THAT LOUISIANA HAS BEEN LOSING LAND FOR THOUSANDS OF YEARS. IT'S THE NATURE OF THE DELTAIC PROCESS. ATTACHED IS A MAP OF LOUISIANA'S LAND LOSS OVER THE PAST 7,000 YEARS (FIGURE 1). WE ALSO KNOW THAT WHILE WE HAVE BEEN LOSING LAND IN SOME YEARS OR IN SOME AREAS, WE HAVE BEEN GAINING LAND IN OTHER YEARS (OR OTHER AREAS). OVERALL, THE LAND GAIN HAS OUTNUMBERED THE LAND LOSS.

HISTORICALLY, WE KNOW THAT IN SOME PERIODS LOUISIANA HAS EXPERIENCED NET LAND LOSS - IN OTHERS, LAND GAIN. SCIENTISTS SAY WE ARE NOW IN A NET LOSS CYCLE. MANY, IF NOT MOST SCIENTISTS, SUGGEST THAT LOUISIANA WOULD BE LOSING LAND NOW EVEN IF WE REMOVED ALL HUMAN INFLUENCES. **LOUISIANA IS IN A NET LAND LOSS CYCLE.**

THAT SAID, IT IS ALSO TRUE THAT MAN HAS AGGRAVATED THIS SITUATION. THE MISSISSIPPI RIVER, GIVEN ITS FREEDOM, WOULD FLOW DOWN THE ATCHAFALAYA RIVER. IF THIS WERE ALLOWED, WE WOULD SEE SIGNIFICANT LAND GAINS. IF WE DESTROYED THE FLOOD PROTECTION LEVEES, WHICH PREVENT OVERBANK FLOODING (AND ITS ATTENDANT SEDIMENT DISTRIBUTION), WE WOULD SEE EVEN GREATER GAINS. EVENTUALLY WE MIGHT EVEN SEE NET LAND GAIN IN COASTAL

LOUISIANA AGAIN. WE WOULD CONTINUE TO LOSE LAND (NATURALLY) IN SOME AREAS OF LOUISIANA, BUT LAND CREATION IN THE ATCHAFALAYA BASIN AREA WOULD TO SOME EXTENT OFFSET THIS LOSS.

THESE FORCES OF NATURE ARE GEOLOGIC PROCESSES WHICH MUST BE RECOGNIZED. ANY SOLUTION TO LOUISIANA'S LAND LOSS PROBLEM MUST FIRST INVOLVE MOTHER NATURE HERSELF. WE CANNOT ACHIEVE TRUE "NO NET LOSS" OF WETLANDS IN LOUISIANA UNLESS WE DESTROY FLOOD PROTECTION LEVEES AND THE OLD RIVER CONTROL STRUCTURES. WE CAN'T ACHIEVE A PURE "NO NET LOSS" GOAL UNLESS WE ALLOW MOTHER NATURE TO RETURN UNRESTRICTED TO THOSE NATURAL PROCESSES WHICH CREATED LOUISIANA'S COASTAL WETLANDS IN THE FIRST PLACE. THIS WOULD OBVIOUSLY BE UNACCEPTABLE FROM A SOCIAL AND PUBLIC SAFETY STANDPOINT.

S. 630 IS MORE REALISTIC. IT PROVIDES THAT THE "NO NET LOSS" STANDARD BE APPLIED ONLY TO DEVELOPMENT ACTIVITIES (MAN-INDUCED LOSSES); IN EFFECT NETTING OUT NATURALLY-CAUSED LAND LOSS. THIS IS THEORETICALLY ACHIEVABLE, WHEREAS A PURE "NO NET LOSS" STANDARD FOR LOUISIANA OBVIOUSLY IS NOT. BUT WHILE MORE REALISTIC, THIS APPROACH TOO COULD PRESENT SERIOUS PROBLEMS. FOR EXAMPLE: WHAT LOSSES ARE ATTRIBUTABLE TO A GIVEN DEVELOPMENT ACTIVITY? WHILE DIRECT LOSSES ARE SOMEWHAT EASIER TO DEFINE (BUT THERE ARE PROBLEMS EVEN HERE), INDIRECT LOSSES MAY BE (AS WE SAID EARLIER) IMPOSSIBLE TO DEFINE, GIVEN THE MANY NATURAL FACTORS AT WORK IN SOUTH LOUISIANA. WHAT THEN MUST A DEVELOPER DO? WHAT MUST HE REPLACE - THE

ONE ACRE HE ACTUALLY DEVELOPED; THE TWO ACRES SOME SAY WERE INDIRECTLY IMPACTED; THE SIX ACRES SOME SUGGEST MIGHT BE IMPACTED IN THE FUTURE? FURTHERMORE, WILL THE STANDARD BE APPLIED ON A PERMIT BY PERMIT BASIS? THE "NO NET LOSS" STANDARD MUST BE FLEXIBLE ENOUGH TO NOT DISCOURAGE APPROPRIATE AND NECESSARY DEVELOPMENT IN SOUTH LOUISIANA.

THESE ARE SERIOUS PROBLEMS WHICH MUST BE ADDRESSED WHEN ONE CONTEMPLATES A GOAL OF "NO NET LOSS" OF WETLANDS. FAILURE TO FIND SOLUTIONS COULD VERY WELL RESULT IN A SIGNIFICANT DECREASE IN DEVELOPMENT ACTIVITY IN SOUTH LOUISIANA. MANY PROJECTS, IN OUR BUSINESS, WOULD QUICKLY BECOME UNECONOMIC GIVEN BURDENSOME ADDITIONAL MITIGATION OBLIGATIONS.

WE EXPRESS THESE CONCERNS BECAUSE THE FUTURE OF LOUISIANA'S OIL AND GAS INDUSTRY, INDEED THE ECONOMIC FUTURE OF THE STATE ITSELF, LIES IN LARGE PART IN SOUTH LOUISIANA. MUCH OF THE STATE'S POPULATION AND THE BULK OF THE STATE'S ECONOMIC BASE RESIDES IN COASTAL LOUISIANA. EIGHTY-FOUR PERCENT OF LOUISIANA'S CRUDE OIL PRODUCTION AND 78 PERCENT OF ITS NATURAL GAS IS PRODUCED IN SOUTH LOUISIANA. IT IS IMPERATIVE THAT DEVELOPMENT CONTINUE. I NOTE THAT S. 630 RECOGNIZES THESE NEEDS ON PAGES 8-9: "THE GOAL OF NO NET LOSS OF WETLANDS SHALL BE ACHIEVED IN A MANNER THAT RECOGNIZES THE MULTIPLE USES OF WETLANDS AND BALANCES, WITHIN THE LIMITS OF THE GOAL, THE ECONOMIC NEEDS OF THE STATE WITH REGARD TO WETLANDS DEVELOPMENT AND WETLANDS CONSERVATION AND

RESTORATION". I AGREE. I ALSO BELIEVE YOU SHOULD ELEVATE THIS MULTIPLE - USE GOAL TO STATURE EQUAL TO THAT OF "NO NET LOSS". THEY ARE NOT MUTUALLY EXCLUSIVE.

I BELIEVE WE ALL NOW REALIZE THAT THE SOLUTION TO LOUISIANA'S COASTAL LAND LOSS PROBLEM IS STRUCTURAL, NOT REGULATORY. WE CANNOT SOLVE LOUISIANA'S PROBLEMS WITHOUT MAJOR DIVERSIONS OF WATER AND SEDIMENT. IT'S ALSO OBVIOUS THAT WERE WE TO ELIMINATE FUTURE DEVELOPMENT ACTIVITY COMPLETELY, WE WOULD SEE MINIMAL CORRESPONDING ENVIRONMENTAL BENEFIT. WE NEED, THEREFORE, TO EMPHASIZE STRUCTURAL SOLUTIONS AND NOT REGULATORY ONES.

IN THIS REGARD, LET ME SAY THIS: THE OIL AND GAS INDUSTRY, AS ONE CAUSE (AMONG MANY) OF WETLAND LOSS IN LOUISIANA, IS VERY INTERESTED IN REDUCING (AND, IF POSSIBLE, ELIMINATING) OIL AND GAS RELATED WETLAND LOSSES. WE CURRENTLY MITIGATE (REDUCE AND OFFSET) OIL AND GAS RELATED DEVELOPMENT IMPACTS. WE DO SO TO THE EXTENT ECONOMICALLY FEASIBLE AND PRACTICAL. WE CANNOT AVOID ALL IMPACTS AND WE CANNOT ECONOMICALLY FULLY MITIGATE IN ALL CASES. WE ARE WILLING TO ACCEPT MITIGATION AS A CONDITION OF DOING BUSINESS HERE. WE HAVE ACCEPTED IT. THE INDUSTRY HAS REDUCED IMPACTS ASSOCIATED WITH ITS WETLAND ACTIVITIES BY OVER 50 PERCENT PER PROJECT SINCE 1980. SOME RECENT STATISTICS SUGGEST 75%. WE ARE DREDGING LESS CANALS AND WHEN WE DREDGE THE CANALS ARE OF THE LEAST LENGTH FEASIBLE. OIL AND GAS ACCESS CANALS HAVE

DROPPED FROM AN AVERAGE OF 1800 FEET IN 1982 TO 500 FEET IN 1988 (FIGURES 2,3,4 AND 5). WE CAN DO MORE, AND AS TECHNOLOGY IMPROVES AND BECOMES MORE ECONOMIC WE WILL, BUT WE CANNOT ELIMINATE OR COMPLETELY OFFSET THESE IMPACTS IN EVERY CASE.

I BELIEVE WE CAN RESOLVE OUR CONCERNS WITH FURTHER CLARIFICATION OF S. 630. I KNOW THAT SENATOR BREAUX HAS INDICATED IN INTRODUCING THE MEASURE "THAT IT IS NOT THE INTENT OF THE BILL TO REQUIRE NO NET LOSS ON A PROJECT-BY-PROJECT BASIS OR TO REQUIRE ON-SITE COMPENSATION IF IT IS NOT POSSIBLE." I'M CONFIDENT WE CAN RESOLVE THESE PROBLEMS WITHIN THE CONTEXT OF S. 630. WE CERTAINLY ENDORSE AND SUPPORT THE GOAL AND FRAMEWORK OF THE BILL AND LOOK FORWARD TO WORKING WITH SENATOR BREAUX AND THIS COMMITTEE WITH RESPECT TO CLARIFICATIONS AND AMENDMENTS. WE WILL BE SUBMITTING MORE SPECIFIC AND DETAILED COMMENTS FOR YOUR CONSIDERATION.

* * *

BEFORE CLOSING LET ME SAY THAT OUR INDUSTRY IS NOT WITHOUT ITS PROBLEMS UNDER THE CURRENT LAW. THE PERMIT SYSTEM IS CUMBERSOME AND BURDENSOME. THE RULES ARE UNCLEAR AND UNPREDICTABLE. THERE ARE TOO MAY AGENCIES INVOLVED. SOME OF MY MEMBERS HAVE HAD PERMITS DELAYED FOR YEARS. (THIS IS THE EXCEPTION, NOT THE RULE, BUT SHORTER DELAYS ARE

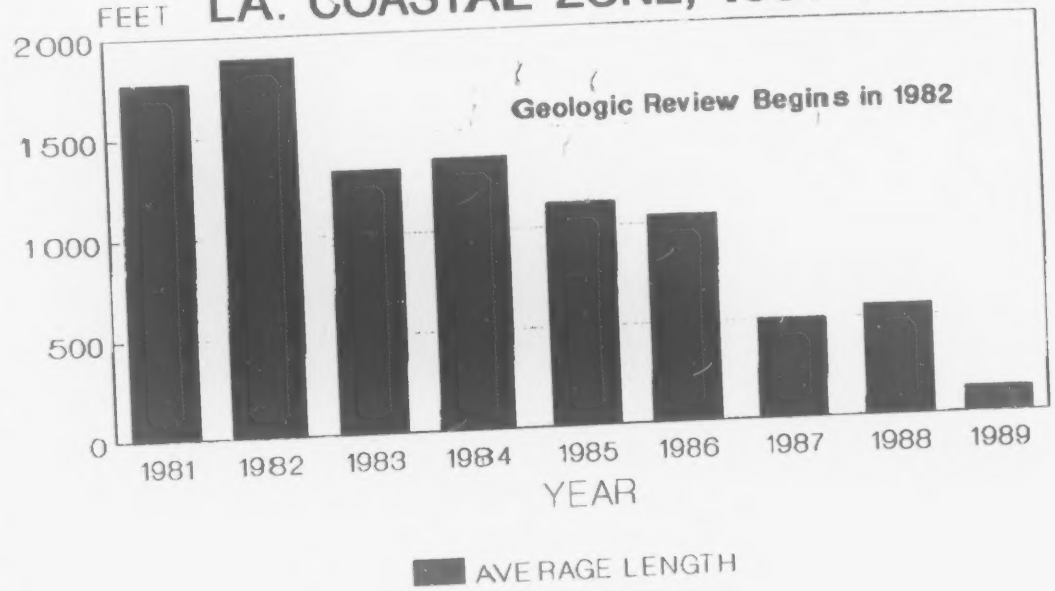
COMMONPLACE.) MANY IN THE ENERGY INDUSTRY AVOID SOUTH LOUISIANA; IT'S TOO EXPENSIVE, TOO DIFFICULT, AND IT'S A REGULATORY NIGHTMARE. THE RULES ARE INCONSISTENTLY APPLIED AND EVER CHANGING. IT'S IMPOSSIBLE FOR SOME TO KEEP UP -- SO, THEY'VE GIVEN UP. WE WELCOME RELIEF IN THIS REGARD.

# # #

IN CLOSING, LOUISIANA'S OIL AND GAS INDUSTRY RECOGNIZES THAT WETLAND LOSS IN THE U.S. (AND PARTICULARLY HERE IN LOUISIANA) IS A TREMENDOUS PROBLEM. WE SHOULD DO ALL THAT IS PRACTICAL AND FEASIBLE TO REDUCE THIS TRAGIC LOSS. S. 630 PROVIDES AN EXCELLENT FRAMEWORK TO BEGIN TO ADDRESS THIS PROBLEM FROM A STRUCTURAL PERSPECTIVE.

WE MUST ALSO RECOGNIZE THAT WE CAN'T, OR SHOULD NOT, ELIMINATE OR SEVERELY RESTRICT DEVELOPMENT IN WETLAND AREAS. THIS WOULD BE DEVASTATING IN LOUISIANA. COASTAL LOUISIANA POSSESSES MULTIPLE NATURAL RESOURCES OF THE FIRST ORDER. WE REITERATE OUR SUPPORT FOR A MULTIPLE-USE POLICY WHICH RECOGNIZES DEVELOPMENT RIGHTS AND ENCOURAGES CONTINUED DEVELOPMENT OF ALL RESOURCES IN SOUTH LOUISIANA WHILE ASSURING APPROPRIATE CONSERVATION OF LOUISIANA'S COASTAL WETLANDS.

AVERAGE LENGTH
OIL AND GAS CANALS
LA. COASTAL ZONE, 1981-1989



J.E. JOHNSTON, III, AND B.J. HARDER, LGS

FIGURE II.

TABLE 1

TABLE OF DISTURBED AREAS IN WETLAND BY PERMITTED OIL AND GAS CANALS*

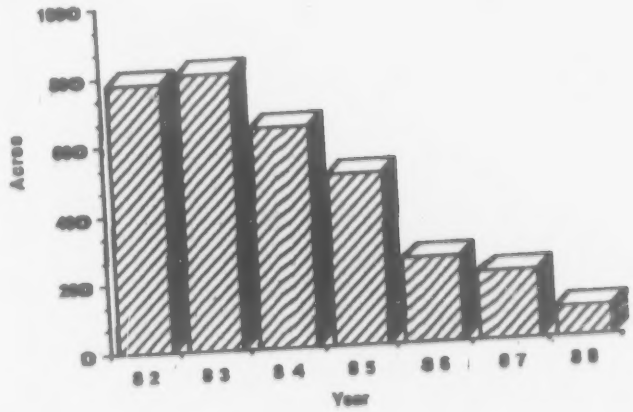
	CANALS	MEAN	MINIMUM VALUE	MAXIMUM VALUE	ACRES
1982	154	5.1	0.2	30.0	779.6
1983	190	4.2	0.1	30.0	804.9
1984	150	4.3	0.1	24.5	638.3
1985	133	3.7	0.1	24.1	499.3
1986	73	3.4	0.1	25.2	247.7
1987	67	2.9	0.1	21.6	195.2
1988	32	2.6	0.1	26.8	82.8
TOTAL	799	4.1			3267.8

*From the Louisiana Coastal Management Program Permit Tracking System

FIGURE III.

FIGURE 1

BAR CHART OF TOTAL DISTURBED AREAS IN WETLANDS*

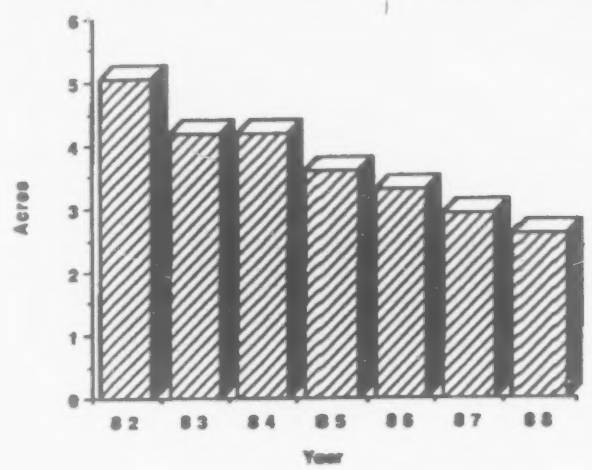


*From the Louisiana Coastal Management Program, shows the amount of disturbed area in wetlands permitted in each year for oil and gas access canals.

FIGURE IV.

FIGURE 2

BAR CHART OF AVERAGE CANAL DISTURBED AREAS IN WETLANDS*



*From the Louisiana Coastal Management Program, shows the average amount of disturbed area in wetlands (mean) in each year for oil and gas access canals.

FIGURE V.

Plaquemines Parish Government

P.O. BOX 61
POINTE-A-LA-HACHE, LA 70082
504-392-6690 • 504-682-0081 • 504-564-2761

COUNCIL MEMBERS
ALBERT J. BESHEL, DISTRICT 1
BENNY ROUSSELLE, DISTRICT 2
JERRY HODNETT, DISTRICT 3
MIKE MUDGE, DISTRICT 4
SULLIVAN J. VULLO, DISTRICT 5
MORRIS TREADWAY, DISTRICT 6
GARY RAGAS, DISTRICT 7
BRYAN DICKINSON, DISTRICT 8
ERNEST JOHNSON, DISTRICT 9
MERL D. ANSARDI, SECRETARY

Parish President
LUKE A. PETROVICH

August 11, 1989

Senator Max S. Baucus
Chairman, Subcommittee on Environmental Protection
Senate Committee on Environment and Public Works
U. S. Senate
706 Senate House Office Building
Washington, D. C. 20510

Dear Senator Baucus:

Plaquemines Parish is the site of one-quarter of the nation's coastal erosion. The people and government of Plaquemines Parish have, in an unprecedented move, issued bonds to fund coastal conservation and restoration projects. However, the burden is clearly greater than the Parish or even the State, which recently rededicated its efforts in this regard, can bear.

S.630 by Senator John Breaux creates an alliance among local, state and federal governments which would conserve and restore Plaquemines and other coastal parishes of Louisiana, where 80 percent of U. S. coastal loss occurs. Senator Breaux's bill calls for no net loss of wetlands due to development, "in a manner that recognizes the multiple uses of the wetlands and balances within the limits of the goal the economic needs of the state with regard to wetland development, conservation and restoration."

Plaquemines Parish is the site of more oil and gas production than any other coastal parish or county in the nation, and the Parish lands $52 million worth of seafood per year. Three hundred fifty ships a day sail through the waters of Plaquemines Parish on their way to and from the nation's largest ports. S.630 deals with the problem of coastal protection in a manner that does not force us to choose between our economic existence and our physical existence.

The Times Picayune August 3, 1989, quoted S. Scott Sewell, Deputy Assistant Secretary of the Interior as saying, "We really wouldn't know exactly where to put the money now if we had it." In response to that statement I would like to

reinforce the comments made at the August 2nd hearing by Senator Breaux and David Soileau of the Louisiana Governor's office as follows:

> We don't need to <u>study</u> the problem any more. We hold in hand the engineering expertise to solve the erosion problem and begin corrective action. The statement, "We don't know where to put the money" is nonsense. Of course we know where to put the money into well engineered, proven solutions that will do a world of good. To delay corrective action for three more years while planners and scientists study the problem is foolish. The problem has been studied to death already. We now need <u>action</u>.

Please add this letter to the record on S.630, as well as the two reports prepared recently for the Parish on coastal issues and projects. I hope they provide useful information to those interested in coastal erosion from a local perspective.

I appreciate your efforts in hearing S.630 and, on behalf of Plaquemines Parish, Louisiana, request your favorable consideration of this critically necessary legislation.

Sincerely,

PLAQUEMINES PARISH GOVERNMENT

Luke A. Petrovich
Parish President

LAP/lwc

08-00689

PLAQUEMINES PARISH
COASTAL CONSERVATION & RESTORATION PROJECT
ENGINEERING REPORT

PREPARED FOR

HONORABLE LUKE A PETROVICH

PRESIDENT

PLAQUEMINES PARISH

BY

JACK MOGER

BROWN & ROOT, U.S.A.

BELLE CHASSE, LOUISIANA

JULY, 1989

Plaquemines Parish is pleased to have the opportunity to submit our recommendations and comments concerning wetland preservation in Louisiana

Plaquemines Parish has taken an initiative to control coastal erosion with two proposed freshwater diversion projects at West Pointe a la Hache and at LaReussite (Naomi). We are prepared to fund these projects totally with $12.5 million in Parish bonds. However, state and/or federal participation is welcomed and solicited, as any additional funding would permit project expansion for increased benefits. At present, these projects have been conceptually designed and permit applications are filed with the Department of Natural Resources (DNR) and the Corps of Engineers, and their approval is imminent.

The coastal erosion problems that exist in Plaquemines Parish were principally caused by two fundamental actions, the purpose of which were to serve the overall interest of the State and the rest of the nation:

a. The channelization of the Mississippi River which prevented the natural diversion of fresh water, silt and sediment from the river into the wetlands.

b. The dozens of interstate pipelines coming from the outer continental shelf waters extending into the mid-west and other points are laid in pipeline canals which impact the coastal areas of Plaquemines Parish. These pipelines serve the interest of the nation as a whole.

These national interests should be compelled to contribute to the restoration of Plaquemines Parish's coastal areas.

We are aware of our coastal erosion problems and have committed the $12.5 million previously outlined to solve the problem, We have a viable concept which includes not only freshwater diversion from the Mississippi River but also nourishing and rebuilding the coastline from Sandy Point to Grand Isle in Jefferson Parish to control intrusion of saltwater along the shoreline. These are the key points to our coastal erosion control plan, and we are prepared to embark on actual construction of these projects.

Plaquemines Parish recommends the following proposals that could be implemented immediately:

a. Modification of Canals and Spoil Banks

Canals and spoil banks that are detrimental to proper circulation of water, sediment and nutrients could be identified and then modified to prevent further erosion. Canals that are no longer in use could be blocked and altered to create a potential environment for marsh growth. Fencing could be used in shallow water areas and along the banks of existing canals to encourage the accumulation of sediment and stop further erosion respectively.

b. Nourishment by Dredge Material

Instead of disposing of dredge material into deeper waters of the Gulf of Mexico, we propose that this material be used to rebuild both marsh and our deteriorating barrier islands. Methods such as high pressure jet sprays allow for this material to be strategically placed in thin layers without harming the existing wetlands. This proposal to use dredge material is a viable solution, but because of the cost, state and federal participation is needed.

c. Permitting Procedures

The means of obtaining the construction permits for coastal and wetland protection projects needs to be re-evaluated. It would seem reasonable that permit acquisition could be expedited as the projects are driven by environmental rather than industrial considerations. Otherwise, degradation of the wetlands will continue during the permitting period resulting in an iterative and more costly engineering effort to evaluate the changes.

d. Management

Local political solvency must be preserved. Management should include cooperative agreements between local government and the State and Federal Governments. Continual management must be in the hands of local government as far as land use and zoning are concerned.

Plaquemines Parish took an initiative in this area by hiring a Project Management Consultant and organizing a coastal restoration and management meeting at the office of Brown & Root in Belle Chasse to discuss solutions to this immense problem. This meeting was attended by technical consultant, local political representatives and state and federal agencies involved in the restoration of the wetlands. We encourage this dialogue to continue so that we will be better able to achieve our goal.

Projects that are currently being proposed, designed or that are in operation to help save coastal wetlands are listed below:

a. Bayou Lamoque. Consists of two large freshwater diversions that divert Mississippi River Water into Breton Sound. These diversions are presently in operation and are controlled by the State Department of Wildlife and Fisheries.

b. White's Ditch. Freshwater diversion structures consisting of siphons that divert 200 cubic feet per second of Mississippi River water into Breton Sound. This diversion is now in operation and is controlled and funded by Plaquemines Parish Government. With extra funding, this diversion could be enlarged for increased benefits.

c. Bohemia Spillway. Structure consisting of 4-60" diameter conduits that were built in 1969 to provide for a flood relief measure to New Orleans during high river states. The structure was rarely used since its construction and is now out of service. The State of Louisiana and Plaquemines Parish expressed an interest in using this structure to divert Mississippi River water into Breton Sound. The structure needs repair, but initial investigation shows that cost would be minimum to put it back in operation.

d. LaReussite and West Pointe a la Hache Freshwater Diversions. Structures that have been conceptually designed by Prescott Follett & Associates which will be funded 100% by Plaquemines Parish Government. Final design of the projects is about to begin, and schedules show that construction could be completed by the Fall of 1990. Each structure consists of 8-72" diameter siphons that will divert 1600 cubic feet per second of

Mississippi River water into existing marsh in the Barataria Basin. Recommendations are to construct additional diversions south of West Pointe a la Hache when funding is available.

e. Pass a Loutre and South Pass Freshwater Diversions. Six freshwater diversions are presently being designed by Brown & Root, USA, Inc. in the Pass a Loutre Wildlife Management area for the the purpose of marsh creation in the Mississippi Delta. The natural levee will be breached at three sites along Pass a Loutre and three sites along South Pass. This project will be funded by the Louisiana Department of Natural Resources. Construction will be completed December, 1989.

f. Caernarvon Freshwater Diversion Structure. This federal/state project is now under construction, and will divert Mississippi River water into Breton Sound at a rate of 6,600 cubic feet per second. Completion of this project is predicted for December, 1990. Plaquemines Parish thoroughly supports this project, and recommends the continuing appropriation of federal funds.

g. Barrier Islands (Shell Island). Protection of the shore and barrier islands is essential in controlling the erosion of Louisiana's coastal area. The barrier islands help reduce the wave energy and associated erosion in the marshes behind them. Since the shoreline is the first area of attack of both wave action and saltwater intrusion, preserving the islands would keep erosion in the inland marshes to a minimum. If the islands are allowed to erode away, erosion will accelerate in the inland marshes. The Parish of Plaquemines in its concept to solve coastal erosion from the area of Sandy Point to Grand Isle is prepared to implement a

program to limit saltwater intrusion by restoring our shorelines by use of dredged material and natural littoral drift along the coast. We are prepared to implement this immediately, but we require federal/state assistance with funding.

Brown & Root, USA, Inc. completed an engineering study to restore Shell Island in April, 1988. The study estimated that it would take $14 million to restore the island. At the time the study was complete, only $7 million was appropriated by the State of Louisiana for construction, and a decision was made not to implement the design. If funding was made available, restoring of Shell Island and other barrier islands can become a reality.

h. Empire Jetties. Realizing the importance of the barrier islands, we recommend the removal of the Empire Waterway jetties. These jetties have interrupted the normal littoral drift (i.e., sediment budget) in the Sandy Point area and will continue to be a major contributor to future island degradation. The removal or partial dismantling of the jetties need to be considered in any engineering solution. Data supporting implementation of an engineering evaluation include the observed depth of the Empire Waterway in the project vicinity of (-)20 to (-)25 feet and the fact that no maintenance dredging has been necessary in the area since 1962. As the design depth of the Empire Waterway was (-)9 feet, the most reasonable explanation for the deepening of the channel is an increase in tidal current (i.e., water velocity). This would explain the observed scour in the area and indicates that tidal currents may now be adequate to maintain the channel open without the jetties. Rip-rap from the dismantled jetties

could be used to structurally enhance the barrier islands and/or as a revetment or slope protection to stabilize the banks of portions of the Empire Waterway which are rapidly eroding in the site area.

As an alternative to removing the jetties, a sand by-pass system could be utilized. Using this design concept, a dredging pipeline system could be installed under the existing waterway. Alternately, a deposition basin could be provided to catch the littorial drift, and standard dredging methods could then be employed to periodically transfer trapped material on the updrift side of the jetties to the downdrift side.

In conclusion, Plaquemines Parish recognizes the importance of our Coastal Marshes to Louisiana's future, and we are actively working on solutions. We stress that time is of the essence, and decisions will have to be made soon to stop this catastrophic loss. Plaquemines Parish is committed to implementing solutions. We seek support in two principal areas: additional funding and expedited permit processing.

COASTAL POLICY PROPOSALS
AND
PLAQUEMINES PARISH

PREPARED FOR

HONORABLE LUKE PETROVICH

PRESIDENT

PLAQUEMINES PARISH

BY

LORI CAMERON

ADAMS AND REESE

BATON ROUGE, LOUISIANA

JULY, 1989

One quarter of the nation's wetland loss is occurring in Plaquemines Parish. The Parish has reacted by taking an unprecedented step -- funding major coastal restoration projects. This month, the State of Louisiana passed legislation creating a Wetlands Conservation and Restoration Authority and a constitutionally-dedicated fund to implement a Wetland Conservation and Restoration Plan.

Now, the focus on coastal policy has shifted to Congress where legislative proposals are rapidly solidifying. The major policy distinction is between "no net loss of wetlands" proposals, which are national in scope, and "no net loss due to development" proposals, which are tailored specifically to Louisiana.

Plaquemines Parish's interest and investment in coastal conservation and restoration has earned it a voice in federal coastal policy discussions. The opportunity exists to assure, first and foremost, that coastal restoration efforts are undertaken; that identified Parish projects are supported; that local government's concerns are addressed in the formulation of plans and regulations; and that economic development is controlled, but not prohibited, in the Parish.

INTRODUCTION

The purpose of this paper is to review a number of the pending coastal policy proposals and to provide Plaquemines Parish officials with a basis for testimony in various forums. It presents a brief history of Louisiana coastal activities, with background information which may prove useful in the explanation of coastal wetland disappearance and consideration of possible alternatives. It discusses state and local activities as well as federal proposals. It concludes with recommendations for Plaquemines Parish.

COASTAL CONCERNS

Coastal issues are as much a part of life in south Louisiana as are homes, roads, schools and jobs. The location of 40 percent of the nation's wetlands, and 80 percent of its wetland loss, concern about the coast is an inescapable part of life.

Water shapes the wetlands and south Louisiana. Water builds. Water destroys. Consequently, flood control has been synonymous with development since European settlement of the area now known as Louisiana. When Bienville founded New Orleans in 1717, work began immediately on a protective levee. Levee construction along the Mississippi River continued through the nineteenth century.

It was the disastrous flood of 1927 which caused tremendous economic devastation and killed more than two hundred people, that led to the federal government's current flood control effort; the Mississippi River and Tributaries project, which is administered and implemented by the U. S. Army Corp of Engineers (COE). Since 1928, almost six billion dollars has been invested by the federal government in COE work to protect the lower Mississippi River region.

Flood control has had two basic impacts on coastal Louisiana. First, it assured the integration of man into the coastal ecosystem. More than two million people live within the parishes which comprise the state's coastal zone. Second, it may be the single most significant factor in wetland loss. Fresh water and sediments, which would otherwise nourish the wetlands, are lost as a result of flood control efforts, over the Outer Continental Shelf (OCS), to the 1,000 foot plus depths of the Gulf of Mexico.

Man's activities in coastal regions -- canals, roads, homes, and businesses-- have further stressed the ecology, shifting the balance toward erosion. Natural forces -- subsidence and sea level rise -- have brought more sea water into coastal areas, killing marshes and destroying wetlands.

Policy meant to save wetlands, which does not provide for human activities, addresses only a selective part of the coastal ecology. Man is as much a part of the ecology as other organisms that live in the region. From the perspective of people who are owners of the wetlands and coastal residents, the end result of either coastal erosion or prohibitions against activities in the wetlands is the same: the loss of property, livelihoods and homes.

STATE AND LOCAL INITIATIVES

Coastal restoration was first addressed by the state in 1981. State Senator Samuel B. Nunez, Jr. led the Senate and House Natural Resources Committees to develop a coastal restoration plan entitled, "Report on Special Projects for Coastal Louisiana". The report identified sixteen projects across coastal Louisiana. The Legislature created the Coastal Environmental Protection Trust Fund, dedicating monies to prevent and control coastal erosion and subsidence.

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Although the Legislature provided a list of projects and the funds with which to pursue them, coastal restoration efforts were stymied administratively by red tape and jurisdictional squabbles. What amounted to a death blow for on-going coastal restoration came in 1988, when all statutorily dedicated funds were seized to help defray the state's general fund deficit. At the time, the Coastal Environmental Protection Trust Fund consisted of over thirty-six million dollars.

Nunez came back in 1989 with a new approach, creating a Wetlands Conservation and Restoration Authority in Act 6 of the Second Extraordinary Session of 1989. The work of the Authority will be funded in part by a constitutionally dedicated fund, as provided for in SB 25 of the Second Extraordinary Session of 1989, by Senator Ben Bagert. The constitutional fund provision goes to the voters for approval on an October 7, 1989 state-wide ballot. If adopted, the Wetlands Conservation and Restoration Fund will receive state mineral revenues up to a limit of forty million dollars.

The Wetlands Conservation and Restoration Authority (the Authority) is, in fact, one person, an executive assistant, appointed by the Governor and charged with developing a state coastal vegetated wetlands conservation and restoration plan (the Plan) for Louisiana. The executive assistant is the designated coastal policy spokesperson for the state, the single voice with which Louisiana will speak on coastal matters.

Although the Act creates an eight member task force, mainly members of the Governor's cabinet, it is silent on the task force's duties or authorities. The Act states only that the Task Force will be chaired by the executive assistant, who will develop procedures for its operations. Act 6 also creates the Office of Coastal Restoration and Management within Louisiana's Department of Natural Resources (DNR), comprised of a Coastal Management Division to conduct permitting and a Coastal Restoration Division to implement the Plan.

Undoubtedly, the Plan will include aspects of the Governor's Coastal Restoration Policy Committee report, prepared in the summer of 1988 under the direction of Manny Fernandez of the Governor's Office. This report was careful to point out that "the causes and extent of deterioration and continued human presence preclude the complete restoration of the entire historic vegetated wetland resource base of Louisiana. Even fully reversing the current rate of marsh loss is highly unlikely." What the report did recommend was the restoration or creation of vegetated wetlands on a localized basis where new sources of water and sediment are available, and intensive marsh management where fresh water and sediment was not available.

The report recognized nine hydrologic basins within the state. Three of those nine basins converge in Plaquemines Parish. They are the Breton Sound Basin to the east, the Mississippi River Delta, and the Barataria Bay Basin to the west. In addition to coastal recommendations, it identified projects for coastal protection and restoration in each basin. Sixteen of the forty-two recommendations were located in one of Plaquemines Parish's three basins.

The emphasis on Plaquemines Parish is justified in that one-third of Louisiana's wetland loss occurs in the Parish. Given that 80 percent of the nation's wetland loss is in Louisiana, fully one in four coastal acres lost in the U. S. are in Plaquemines Parish.

A small parish, Plaquemines has taken an unprecedented step and issued revenue bonds to fund local coastal restoration projects. When construction concludes next year, the Parish will have spent roughly the same amount that the state has -- about ten million dollars -- on project construction.

The two underway projects incorporate one of the most promising methods of wetland restoration, controlled fresh water diversion. By diverting fresh water from the Mississippi River, the Parish hopes to restore the saline/fresh water balance, thereby promoting marsh development. The Parish has been unable to pursue a number of additional projects which, with engineering work complete, lack only funding. Other methods of coastal restoration under consideration by the Parish include barrier island management and utilization of dredged material.

Although on a different scale, these are the same methods being evaluated by some large landowners in the wetlands. It is estimated that 80 percent of Louisiana's wetlands are privately owned. Given the substantial investment of the state, Plaquemines Parish, and private interests throughout south Louisiana, federal coastal proposals are being closely scrutinized.

LOUISIANA-SPECIFIC FEDERAL INITIATIVES

Chief among federal coastal efforts is Senator John Breaux' S 630 "Louisiana Coastal Wetlands Conservation and Restoration Act", which is co-sponsored by Senator J. Bennett Johnston and Senator George Mitchell. Drawing on the work of the Governor's Task Force and others, Breaux' bill goes to the heart of 80 percent of the nation's wetland loss -- protecting and restoring coastal Louisiana.

The goal of Breaux' bill is "no net loss of wetlands as a result of development". Its purpose is to address rapid loss of coastal wetlands within Louisiana and to authorize the state to develop and implement a program that achieves a goal of no net loss as a result of development.

The bill is based upon a cooperative effort among the COE, the U. S. Environmental Protection Agency (EPA), the State of Louisiana. These three entities are to agree to a process which would designate a single state agency to develop a Coastal Wetlands Conservation and Restoration Plan within three years. Over that period the state would receive $15 million from the federal government to assist in the planning process. To allay fears that current, on-going projects might be delayed by the three year planning process, the bill provides that federal officials shall continue coastal restoration and conservation projects commenced in Louisiana and that such authorized projects will not be conditioned on payment of a non-federal cost share.

According to the bill, the goal of no net loss due to development shall be achieved **"in a manner that recognizes the multiple uses of the wetlands and balances within the limits of the goal the economic needs of the state with regard to wetland development, conservation and restoration."** Key elements of the plan would include identification of the area of coastal wetlands in the state, designation of a single state agency for implementing and enforcing the plan, permitting to assure no net loss of wetlands due to development, a wetlands accounting system, a prioritized schedule for restoration, and public education.

Under S 630's approved plan, the state would assume permitting now done by the COE in conjunction with EPA, under the Section 404 program of the Federal Water Pollution Control Act (FWCPA). The permitting system would also assure compliance with inspection, monitoring, and entry requirements of the FWPCA and the U. S. Fish and Wildlife Service's (FWS) consultation requirements under the Endangered Species Act.

Once the plan is completed by the state, it would require approval by the COE and EPA. Thereafter, the state would receive five percent of all bonuses, rents, and royalties from federal OCS leasing operations to implement the Plan. Breaux points out that the five percent amounted to about one hundred forty-five million dollars last year. Projects would require ten percent state funding, but that amount could be in the form of in-kind contributions.

From a coastal policy standpoint, the bill proposes a landmark change with regard to the COE. It would expand the COE mission statement to include "protection, restoration and creation of vegetated wetlands, ...such projects to be given equal priority with projects relating to navigation and flood control". This will allow the COE, which has been so successful at flood control, to focus on coastal protection and restoration as well.

U. S. Representative Billy Tauzin, whose congressional district encompasses much of Louisiana's coastal area, has also proposed legislation addressing coastal restoration. To illustrate how quickly federal coastal proposals are evolving, Tauzin is currently drafting a second coastal restoration bill. Tauzin's first bill, HR 824, was filed February 2, 1989 and is entitled the "Coastal Wetlands Recovery Act". It is the same bill filed during the previous session of Congress.

Under the terms of HR 824, the Secretary of the Army would identify threatened coastal wetlands and within six months designate the ten most threatened wetlands in the nation. Within two years the Secretary would prepare an action plan for those ten most threatened wetlands and within five years a plan for each threatened coastal wetland.

These plans would be developed in conjunction with the coastal state's lead agency and would incorporate the state's recommendations unless considered not technically feasible. The plans would be required to be consistent with federal law and with the federal Coastal Zone Management Act. At least twenty-five percent of the cost of implementation of the plan would have to be non-federal although the non-federal share could be in-kind contributions.

Tauzin's HR 824 would authorize federal appropriations not to exceed forty million dollars per year for any single coastal wetland program. Importantly, twenty million dollars per year would be available immediately for demonstration projects.

Tauzin hopes to file a second coastal restoration bill shortly. It will address problems he fears the state might have under the terms of the Breaux bill. Tauzin is particularly concerned about the state's assumption of the Section 404 permitting program. He feels that program, in its current form, regulates the deposition of dredge material on the basis of national standards, which do not work to Louisiana's best advantage, especially when dredge material might be used to restore the state's coastal areas. Tauzin worries that the state might be stuck enforcing rules that work to its detriment.

Additionally, Tauzin would like to give the state authority to expedite approval of "favored" projects which would protect coastal wetlands. Finally, Tauzin is considering a wetland mitigation banking system which would allow development in certain wetland zones in exchange for mitigation credits in other zones.

GENERAL FEDERAL PROPOSALS

In addition to Louisiana-specific proposals, there are numerous general federal wetland proposals. Most are based on what might loosely be called the "EPA-Bush Administration initiative." President Bush has repeatedly called for a strong federal commitment to wetland conservation and restoration and no net loss of wetlands.

On November 15, 1988, the National Wetland Policy Forum, a group sponsored at EPA's request by the Conservation Foundation, culminated two years of work with the release of a final report. The project had been chaired by Conservation Foundation Chairman William Reilly, who was shortly thereafter tapped by President Bush to be Administrator at EPA. In January of 1989, the EPA announced a new Wetland Action Plan, incorporating more than one hundred specific recommendations from the Forum report.

The Wetland Action Plan seeks to increase protection of wetlands and streamline permitting activities in wetlands nationally. EPA has adopted the goals of the Forum report: a) to achieve no overall new loss of the nation's remaining wetland base, as defined by acreage and function; and b) to restore and create wetlands, where feasible, to increase the quality and quantity of the nation's wetland resource base.

The general recommendations of the Forum report were: a) the development and use by all regulatory agencies of a standard definition of wetlands; and b) the transfer of primary responsibility for Section 404 permitting from the federal government to states with EPA-approved wetland conservation plans. Rather than propose an omnibus piece of legislation, the Forum report proposes separate pieces of federal legislation on fees, conservation programs, and other matters as well as administrative revisions to Executive Order 11990.

EPA has established seven objectives to implement its goal:

A. A wetlands planning initiative;
B. Mechanisms to increase state/local role in wetlands protection;
C. Section 404 regulatory fixes (dealing with enforcement guidelines and jurisdiction/delineation);
D. A mitigation policy;
E. Public information and education;
F. A cumulative wetland loss and degradation impact assessment study; and
G. Wetland restoration.

One of the Section 404 proposals, calling for a uniform definition of wetlands was quickly implemented. In January, 1989 the EPA, COE, FWS and Department of Agriculture's Soil Conservation Service agreed to adopt a single technical manual for use in identifying wetlands. The Joint Federal Manual for Identifying and Delineating Wetlands became effective on March 20, 1989.

The EPA Wetland Action Plan is not limited to coastal wetlands. For instance, the document contains regional highlights dealing with inland wetland loss in the central migratory bird flyway in Kansas, and the prairie pothole region of the northcentral U.S. However, a Coastal Louisiana Initiative, which targets the region for restoration as well as protection, is also part of the EPA Plan. EPA is using three alternatives to achieve wetland goals in Louisiana -- planning, regulation, and research and development.

Region VI of EPA is working with the state and the COE on a number of major planning efforts including 1) a Louisiana comprehensive coastal wetlands plan, 2) Louisiana marsh management strategies, 3) marsh management programmatic environmental impact statements, 4) a land loss and marsh creation study, 5) a shore and barrier island initiative, and 6) environmental impact statements for COE dredge disposal sites.

On the regulatory side in Louisiana, EPA intends to review about one thousand individual Section 404 permits and increase enforcement efforts. Table 1 lists the ten on-going EPA research and development projects relating to coastal Louisiana.

TABLE I

EPA REGION VI
ONGOING LOUISIANA
COASTAL RESEARCH AND DEVELOPMENT
PROJECTS

1. Cumulative impact assessment of losses in the Pearl River Basin
2. Advance identification of priority wetlands near Slidell, Louisiana
3. Designation of Barataria Bay Basin into the National Estuary Program
4. Atchafalaya Basin Delta Creation Studies
5. Louisiana coastal area - Mississippi River Delta Study
6. Interpreting and digitizing aerial photos of coastal Louisiana
7. Mapping field monitoring impact assessment of marsh management areas
8. Oil and gas operations impacts handbook for wetland managers
9. Golden Meadow Plant Materials Laboratory erosion control
10. Gulf of Mexico Program

Source: Office of Water, Office of Wetland Protection. U. S. Environmental Protection Agency. Wetlands Action Plan. Washington, DC, January, 1989; p. 6.

CONCLUSION

Perhaps no other entity has the interest, or as much at stake, in coastal restoration as does Plaquemines Parish -- site of one-quarter of all the wetland loss in the United States.

The passage of Act 6 of the Second Extraordinary Session of the Louisiana Legislature, creating the Wetland Conservation and Restoration Authority shifted the focus on coastal policy making to the federal level and Congress. There are two principal policy directions, each concerned with no net loss of wetlands. The "EPA - Bush Administration" approach, based on the National Wetlands Policy Forum report, is no net loss of wetlands by function or acreage.

The second policy approach is specific to wetland loss in Louisiana (site of 80 percent of the nation's wetland loss). Its proponents call for "no net loss as a result of development". The distinction between the two policies is absolutely critical to Louisiana.

If development is prohibited in areas where overall wetland loss is occurring, economic activity will grind to a halt in south Louisiana. If, however, wetland loss is considered on a project-by-project basis, losses may be mitigated as required by the permitting process, and economic activity may continue.

The Governor's Coastal Restoration Policy Committee Report made an important point in this regard; "Solutions must deal with the dynamic nature of Louisiana's coast and the complex interactions between natural processes and human activities, and must consider flood control, navigation, and other water-dependent aspects of coastal resource use." The two parish-funded freshwater diversion projects are part of such a solution, as are other projects the parish has ready for construction.

Plaquemines Parish's interest and investment in coastal conservation and restoration has earned it a voice in federal coastal policy discussions. The opportunity exists to assure, first and foremost, that coastal restoration efforts are undertaken; that identified Parish projects are supported; that local government's concerns are addressed in the formulation of plans and regulations; and that development is controlled, but not prohibited, in the Parish.

II

101ST CONGRESS
1ST SESSION

S. 630

To conserve, protect, and to restore the coastal wetlands of the State of Louisiana, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MARCH 16 (legislative day, JANUARY 3), 1989

Mr. BREAUX (for himself, Mr. MITCHELL, and Mr. JOHNSTON) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

---

A BILL

To conserve, protect, and to restore the coastal wetlands of the State of Louisiana, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Louisiana Coastal Wetlands Conservation and Restoration Act".

SEC. 2. FINDINGS.

The Congress finds that—

(1) wetlands provide multiple benefits and are vital to the Nation's environmental and economic health;

(2) the environmental benefits of wetlands include, among others, providing critical habitat to avian, terrestrial, and aquatic species; maintaining water quality; forming barriers to waves and erosion; helping to reduce flood damages; nurturing valuable commercial and recreational fisheries; and providing habitat for rare and endangered species;

(3) wetland development and alteration has benefited the public in many ways that include among others, highway construction, agricultural development, housing and business construction; flood protection, natural resource development; and port and marina development;

(4) scientists estimate that since European settlement began in the United States, more than 50 percent of the wetlands in the 48 coterminous States have been lost due to manmade and natural causes;

(5) the State of Louisiana contains a significant portion of the Nation's wetlands including 40 percent of the Nation's coastal marshes;

(6) the coastal marshes of Louisiana are of particular value to the Nation for they contribute 46 percent of the Nation's annual shrimp harvest; contain the wintering grounds of millions of migratory birds and are crucial to meeting the United States international

migratory bird treaty obligations with Canada, Mexico, Japan, and the Soviet Union; contribute 40 percent of the Nation's wild fur and hide harvest; contribute 16 percent of the Nation's total production of petroleum and 20 percent of the Nation's total production of natural gas; and buffer the destructive effects of hurricanes, storms, and floods;

(7) Louisiana is losing up to 50 square miles of these valuable coastal wetlands per year which is 80 percent of the total loss of the Nation's coastal wetlands; at this rate of loss, between now and the year 2040, it is estimated that nearly one million additional acres of wetlands will be lost—an area 1 and ⅓ times larger than the State of Rhode Island—bringing the total loss of coastal wetlands to an estimated 2.4 million acres by the year 2040;

(8) the loss of coastal wetlands means a loss of valuable fish, shellfish, migratory bird, and fur resources and will jeopardize valuable public investments including 100 miles of Federal and State highways 55 miles of hurricane protection levees and floodwalls, 27 miles of railroad tracts, 1,570 miles of oil and gas pipelines, and 383 miles of gas, water, electric power, and telephone lines;

(9) the Mississippi River drains 40 percent of the United States and has been developed by the Federal Government to provide navigation and flood control benefits to the entire Nation, including construction and maintenance of three of the largest deepwater ports in the country that service producers nationwide; development of an extensive inland navigation system that helps connect producers with the ports and world markets; and the construction of flood control levees that have prevented and estimated $111.3 billion of flood damages;

(10) these flood control and navigation activities conducted by the Federal Government have contributed significantly to the loss of coastal Louisiana because development of the Mississippi River has resulted in fresh water and sediment no longer nurturing coastal wetlands of the Mississippi River delta, but are being dumped instead into the deep waters of the Gulf of Mexico;

(11) in order for the citizens of the United States to continue to benefit from the coastal wetlands of Louisiana, efforts must be made to significantly reduce the rapid rate of loss;

(12) a coastal wetlands restoration plan that includes engineering solutions to restore and conserve

coastal wetlands is critical to arrest the loss of wetlands associated with the development of the Mississippi River;

(13) in addition to the need for a plan to restore wetlands, a plan is necessary that contains a program to conserve coastal wetlands in the State of Louisiana to achieve a goal of no net loss of wetlands as a result of development activities; and

(14) because of the large portion of the Nation's coastal wetlands located within the State of Louisiana, the disproportionate rate of loss of these wetlands, and the unique causes of the loss, there needs to be a unique solution to address the rapid rate of loss of coastal wetlands in the State.

SEC. 3. PURPOSE.

(a) The purposes of this Act are to—

(1) provide for the development and implementation of a restoration program to address the rapid loss of coastal wetlands in Louisiana; and

(2) authorize the State of Louisiana to develop and implement a program that achieves a goal of no net loss of coastal wetlands as a result of development activities.

SEC. 4. DEFINITIONS.

As used in this Act, the term—

(1) "Secretary" means the Secretary of the Army;

(2) "Administrator" means the Administrator of the Environmental Protection Agency;

(3) "Governor" means the Governor of the State of Louisiana;

(4) "development activities" means any activity, including the discharge of dredged or fill material, which results directly in a more than de minimus change in the hydrologic regime, bottom contour, or the type, distribution or diversity of hydrophytic vegetation, or which impairs the flow, reach, or circulation of surface water within wetlands or other waters;

(5) "State" means the State of Louisiana; and

(6) "restoration" means those activities intended to create, restore, or protect coastal wetlands by methods that include sediment and freshwater diversion, and restoring and maintaining barrier islands.

SEC. 5. AGREEMENT TO DEVELOP A WETLANDS CONSERVATION AND RESTORATION PLAN.

(a) The Secretary and the Administrator are directed to enter into an agreement authorized by subsection (b), with the Governor upon notification of the Governor's willingness to enter into such agreement.

(b)(1) Upon receiving notification pursuant to subsection (a), the Secretary and the Administrator shall promptly enter

into an agreement with the State described in paragraph (2) (hereafter in this Act referred to as the "agreement").

(2) The agreement shall—

(A) set forth a process by which the State agrees to develop, in accordance with this Act, a Coastal Wetlands Conservation and Restoration Plan (hereafter in this Act referred to as the "Plan");

(B) designate a single agency of the State to develop the Plan;

(C) assure an opportunity for comment and review on the Plan, during the planning period, by the public and by Federal and State agencies; and

(D) obligate the State, not later than 3 years after the date of signing the agreement, unless extended by the parties thereto, to submit the Plan to the Secretary and the Administrator for their approval.

(c) Upon the date of signing the agreement—

(1) the Secretary shall make grants, in the aggregate amount of $5,000,000, to assist the designated State department in developing the Plan;

(2) the Secretary and the Administrator shall provide technical assistance to the State to assist it in the development of the Plan;

(3) studies or construction of existing authorized projects for coastal restoration within the State shall

not be conditioned on payment of a non-Federal cost share;

(4) any project developed to restore the coastal wetlands, within the State which the Secretary finds significantly contributes to wetlands restoration shall be deemed to have a favorable benefit to cost ratio for purposes of Federal law; and

(5) the Secretary and the head of each Federal agency shall continue with ongoing coastal restoration and conservation projects commenced in the State of Louisiana prior to the signing of the agreement, including those authorized by the Louisiana Coastal Area Study, section 713 of the Water Resources Development Act of 1986, and section 3(a)(8) of the Water Resources Development Act of 1988, except that no non-Federal cost share shall be required.

(d) There are authorized to be appropriated to the Secretary $5,000,000 for each of the fiscal years 1990, 1991, and 1992 to carry out paragraph (1) of subsection (c).

SEC. 6. WETLANDS CONSERVATION AND RESTORATION PLAN.

(a) The Plan developed pursuant to this Act shall establish a program to assure that no net loss of wetlands occurs in the coastal areas of Louisiana as a result of development activities in such wetlands or other waters. The goal of no net loss of wetlands shall be achieved in a manner that recog-

nizes the multiple uses of wetlands and balances, within the limits of such goal, the economic needs of the State with regard to wetlands development and wetlands conservation and restoration.

(b) Such plan shall identify coastal wetland areas in Louisiana needing restoration, and describe projects to restore such wetlands.

SEC. 7. ELEMENTS OF THE PLAN.

The Plan authorized by this Act shall include the following elements—

(1) identification of the entire area in the State of Louisiana that contains coastal wetlands;

(2) designation of a single State agency with the responsibility for implementing and enforcing the Plan;

(3) a program that the State shall establish, administer, and enforce under State law, to require permits for development activities in wetlands and other waters in the coastal area to assure a no net loss of such wetlands as a result of such development activities;

(4) a system that the State shall implement to account for gains and losses of wetlands within coastal areas for purposes of evaluating the degree of compliance with the goal of no net loss of wetlands as a

result of development activities in such wetlands or other waters;

(5) satisfactory assurances that the State will have adequate personnel, funding, and authority to implement and enforce the wetlands permit program established under the Plan;

(6) a program that identifies coastal areas that should receive priority for technically feasible restoration projects, that sets a schedule for completion of such projects, and that provides a research program to develop methods for coastal restoration and the evaluation of methods applied;

(7) a program to be carried out by the State for the purpose of educating the public of the necessity to conserve wetlands;

(8) a program to encourage the use of technology by persons engaged in development activities that will result in negligible impact on wetlands;

(9) a program for the review, evaluation, and identification of regulatory and nonregulatory options that will be adopted by the State to encourage private owners of wetlands to continue to maintain those lands as wetlands; and

(10) a program of how the requirements of section 14(a) will be met.

SEC. 8. PERMIT PROGRAM.

(a) For the purposes of carrying out the permit program required under section 7(3) to assure no net loss of wetlands as a result of development activities in the wetlands and other waters of the coastal area, the State shall establish that it has the following authority with respect to the issuance of permits—

(1) to issue permits which—

(A) are subject to standards of review that are at least as stringent as those required by the guidelines promulgated December 24, 1980 (40 CFR part 230) pursuant to section 404(b)(1) of the Federal Water Pollution Control Act (33 U.S.C. 1344(b)(1));

(B) are for fixed terms not exceeding 5 years; and

(C) can be terminated or modified for cause including, but not limited to, the following:

(i) violation of any condition of the permit;

(ii) obtaining a permit by misrepresentation, or failure to disclose fully all relevant facts; and

(iii) change in any condition that requires either a temporary or permanent re-

duction or elimination of the permitted discharge;

(D) apply, and assure compliance with, all applicable requirements of section 308 of the Federal Water Pollution Control Act (33 U.S.C. 1318) or to inspect, monitor, enter, and require reports to at least the same extent as required in such section 308;

(E) are subject to such terms, conditions, and restrictions, as the State shall provide;

(F) state the purpose of the project and associated activities for which the permit is sought; and

(G) demonstrate consultation with the United States Fish and Wildlife Service for purposes of compliance with the Endangered Species Act (16 U.S.C. 1531 et seq.)

(2) to assure that the public, and any other State of the United States, the waters of which may be affected, receive notice of each application for a permit, and obtain copies of each permit application and each permit issued under this section, and can obtain upon request any permit application or portion thereof for the purpose of reproduction, and to assure that there

will be an opportunity for public hearing before a ruling on each such application;

(3) to assure that any other State of the United States whose waters may be affected by the issuance of a permit by the State of Louisiana may submit written recommendations to the State of Louisiana, and the Administrator, with respect to any permit application and, that if any part of such written recommendations is not accepted by the State of Louisiana, the State of Louisiana will notify such other affected State of the United States, and the Administrator, in writing of its failure to so accept such recommendations, together with its reasons for so doing;

(4) to abate violations of the permit or the permit program, including civil and criminal penalties and other ways and means of enforcement; and

(5) to assure continued coordination with Federal and Federal-State water-related planning and review processes.

(b) Compliance with a permit issued pursuant to this section is deemed compliance with sections 301, 307, 309, and 505 of the Federal Water Pollution Control Act (33 U.S.C. 1311, 1317, 1319, and 1365).

SEC. 9. APPROVAL OF THE PLAN.

(a) Upon the completion of the Plan, the Governor is authorized to submit the Plan to the Secretary and the Administrator for their approval. The Secretary and the Administrator shall, within 180 days following the submission to them of the Plan, approve or disapprove such Plan.

(b) The Secretary and the Administrator shall approve such Plan, if they determine that—

(1) the State has adequate authority to fully implement and enforce all provisions of the Plan, including the permit program required under section 7(3);

(2) such Plan is in compliance with the requirements of sections 6 and 7; and

(3) the Plan was adopted after reasonable notice and hearing.

(c) If the Secretary and the Administrator, under subsection (b) find that the Plan is not in compliance with the requirements of this Act, they shall submit to the Governor a statement explaining why the Plan is not in compliance and how the Plan should be changed to be in compliance. The State shall have 180 days following the receipt of such statement to correct the deficiencies and to submit a modified Plan to the Secretary and the Administrator for their approval. The Secretary and the Administrator shall have 90 days to determine whether the modifications render the Plan adequate. If the Secretary and the Administrator fail to approve

or disapprove such Plan, as modified, within the 90-day period following the date on which it was submitted to them by the Governor, such Plan, as modified, shall be deemed to be approved effective upon the expiration of such 90-day period.

(d) The State is authorized, from time to time, to modify the Plan approved under this Act. Any such modification shall be submitted, considered, and acted on in the same manner as in the case of approval of the initial Plan.

SEC. 10. IMPLEMENTATION AND ENFORCEMENT OF THE PLAN.

(a) Following its approval in accordance with section 9, the Plan shall be implemented and enforced as provided therein.

(b) The authority under this section to carry out a coastal area permit program shall take effect upon the date of the approval of the Plan under section 9. On and after the date on which such program becomes effective, the provisions of section 404 of the Federal Water Pollution Control Act (33 U.S.C. 1344) shall not be applicable to any wetlands or other waters of the coastal areas of the State. In any case in which such coastal area permit program is not in effect on and after such date, the provisions of such section 404 are deemed to be applicable to wetlands and other waters of the coastal

area during the period that such coastal area program is not in effect.

(c) Individual permits issued for activities in the coastal areas pursuant to section 404 of the Water Pollution Control Act (33 U.S.C. 1344) which are in effect on the date of the approval of the Plan under this Act shall remain in effect after such date in accordance with the terms and conditions thereof. Applications for such permits which are pending, shall otherwise be subject to the coastal area permit program while it is in effect.

SEC. 11. SANCTIONS FOR NONCOMPLIANCE.

(a) If the Secretary and the Administrator find that the State is not implementing or enforcing the permit program required by section 7(3) or any other provision of the Plan in accordance with the requirements of this Act, they shall immediately notify the State. The State shall have 90 days following such notice to take corrective action.

(b) If the State fails, within such 90-day period, to take such corrective action, the Secretary may suspend the payment of all Federal money to the State under this Act for wetlands conservation, restoration, or permitting activities until such corrective action is taken.

(c) If the State fails to take such corrective action within 270 days following the receipt by the State of the notification under subsection (a), the Secretary and the Administrator

may, after a hearing, revoke their approval of the Plan. Notice of such revocation shall be published in the Federal Register.

(d) Immediately upon the revocation of such approval by the Secretary and the Administrator, the provisions of section 404 of the Federal Water Pollution Control Act shall be applicable to the wetlands and other waters of the State and in full force and effect with respect thereto.

SEC. 12. WETLANDS CONSERVATION AND RESTORATION FUND.

(a) There is established in the Treasury of the United States a trust fund to be known as the "Coastal Wetlands Conservation and Restoration Trust Fund" (referred to in this Act as the "Trust Fund"). The Trust Fund shall consist of such amounts as may be appropriated to it as provided in this section.

(b) There is appropriated to the Trust Fund for fiscal year 1990, and each fiscal year thereafter, an amount, as determined by the Secretary, equivalent to 5 percent of all bonuses, rents, and royalties paid to the United States in connection with leasing activities on the Outer Continental Shelf during the preceding fiscal year.

(c) Amounts in the Trust Fund are hereby appropriated to the Secretary for use by him in making grants under section 13.

(d) It shall be the duty of the Secretary of the Treasury to report to the Congress each year on the financial condition and the results of the operation of the Trust Fund during the preceding fiscal year and on its expected condition and operations during the next 5 fiscal years.

(e)(1) It shall be the duty of the Secretary of the Treasury to invest such portion of the Trust Fund as is not, in his judgment, required to meet current withdrawals. Such investments may be made only in interest-bearing obligations of the United States. For such purpose, such obligations may be acquired—

(A) as original issue at the issue price, or

(B) by purchase of outstanding obligations at the market price.

(2) Any obligation acquired by such Trust Funds may be sold by the Secretary of the Treasury at market price. The interest on, and the proceeds from the sale or redemption of, such obligation held in such Trust Fund shall be credited to and become a part of the Trust Fund.

SEC. 13. GRANTS.

(a) Moneys in the Trust Fund shall be available to the Secretary to make grants to the State to implement the provisions of the Plan. Such grants shall be made to the State in such amounts and at such times as necessary to implement

the provisions of the Plan. The State shall become eligible for such grants upon the approval of the Plan.

(b) Grants for funding any restoration project approved pursuant to section 7(6) shall not exceed in the aggregate an amount in excess of 90 percent of the cost of such project. The 10 percent share of the cost required of the State shall be from a non-Federal source, but such State share may be an in kind contribution.

SEC. 14. FEDERAL OVERSIGHT.

(a) The Governor shall, not less than annually, report to the Secretary and the Administrator on the status of the program implemented pursuant to this Act. Additional reports may be required by the Secretary and the Administrator.

(b) On or before January 31, 1991, the Secretary and the Administrator shall report to Congress as to the status of the implementation of the Plan.

(c) At the end of each 24-month period thereafter, the Secretary and the Administrator shall report to the Congress on the status of the Plan and an evaluation of the effectiveness of the Plan in meeting the provisions of this Act.

(d) The Secretary and the Administrator shall have the authority to inspect, at an appropriate time, all records, permits, and other relevant data and documents of the State necessary to enable the Secretary and the Administrator to carry out the provisions of this Act.

SEC. 15. ADDITIONAL AUTHORITY FOR THE CORPS OF ENGINEERS.

The Chief of Engineers of the Department of the Army is authorized to carry out projects for the protection, restoration, and creation of vegetated wetlands. In carrying out such projects, the Chief of Engineers shall give such projects equal priority with projects relating to navigation and flood control.

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